

Submission No.			This cover letter is common to OPW Submission No.'s 213 to 240.	
Organisation Name or Name of Submitter			Office of Public Works (OPW)	
Item No.	Section Ref.	Page No.	Observation Statement	TII Response
OPW Cover Letter - Re: Railway (Metrolink–Estuary to Charlemont via Dublin Airport) Order 2022 – Submissions by the Commissioners of Public Works in Ireland				
1	Cover letter - Legal Requirements	2	<p>Critical aspects of this project relating to physical construction methodologies have not yet been determined and, therefore, a full analysis of any impacts on properties is not possible. In that regards submissions are only possible and limited to the information that has been made available at this juncture.</p> <p>As noted above, the OPW is supportive of the Metrolink project. However, this is subject to all statutory requirements being complied with, in light of the Commissioners’ duties under the Commissioners of Public Works (Functions and Powers) Act 1996 and other Acts.</p> <p>Therefore, the confirmation of the Railway Order should ensure that the proposed Metrolink project properly falls into one or more of the criteria in s.116 of the 2008 Act.</p>	<p>TII welcome the OPW support for the proposed project.</p> <p>The OPW misconstrues this provision. First, it deals only with the statutory functions of the OPW. It does not bind the Board. Second, it confirms that the OPW can derogate from their obligations to maintain SSG as a park (and ancillary obligations) where there is a railway order for railway works. By definition, the railway works cannot benefit from a railway order while the Board is considering whether or not to grant that railway order. We do not understand what the OPW expects the Board to do in respect of the cited provisions.</p> <p>The OPW's statutory functions to maintain SSG have since been transferred to other public authorities, although they still in practice look after the day-to-day operation of SSG. TII will expand on this point elsewhere as appropriate.</p>
2	Cover letter - Legal Requirements	3	<p>Secondly, the Commissioners of Public Works are of the view that the requirements in the National Monuments Act 1930, as amended, would have to be complied with, irrespective of the confirmation of the Railway Order and that a Ministerial consent or consents will have to be obtained by TII where there is potential demolition of a national monument.</p>	<p>This submission is only tangentially relevant to the Board's decision on the Railway Order application. The Board's statutory function is to identify, describe and assess the likely significant impacts of the railway works on the environment, including heritage assets like SSG. Those impacts have been fully identified, described and assessed in the EIAR.</p> <p>In addition, the Board must have regard to whether the grant of a railway order is in the interests of proper planning and sustainable development, which is comprehensively dealt with in the Planning Report.</p> <p>OPW's submissions concerns a totally different statutory code, which lies outside the Board's functions.</p> <p>Section 14 of the National Monuments Act 1930 provides that the consent of the Minister for Housing Local Government and Heritage (the Minister) is required for certain works at or near a national monument in the ownership or guardianship of the Minister or a local authority. As SSG is owned by the Minister, consent under Section 14 will be required as a pre-condition to TII carrying out any works under the RO in and around SSG.</p> <p>TII's position is that it is a gross mischaracterisation to say that the works proposed at SSG amount to the demolition or partial demolition of a national monument. "Demolish" is defined in the online Cambridge English Dictionary as "to completely destroy a building, especially in order to use the land for something else." Given the National Monuments Act protects monuments that are not buildings, the statutory meaning must include the full range of national monuments. However, the emphasis on complete destruction and change in use of the land is consistent with the way in which Section 14D only applies to demolition and not other (i.e. lesser) kinds of interference that require ministerial consent. Section 14D, in our view, is intended to be reserved for the most significant kinds of destruction, involving a complete and permanent change to the national monument in question.</p> <p>As such, TII do not believe the felling of trees or other proposed works constitutes demolition. In that regard, it is particularly important that the trees are by their nature a cyclical resource and subject to removal and replacement as part of the ordinary management of the park.</p> <p>Nevertheless, TII will engage with the Minister following the grant of the Railway Order in relation to consent under section 14 and comply with the Minister's requirements and all applicable legal requirements. These may change when the Historic and Archaeological Heritage and Miscellaneous Provisions Bill 2023 is enacted and commenced. Accordingly, the only condition that it is appropriate to insert in the Railway Order in this regard is that TII comply with all applicable statutory requirements in relation to the protection of the St Stephens Green national monument.</p>

Submission No.			This cover letter is common to OPW Submission No.'s 213 to 240.	
Organisation Name or Name of Submitter			Office of Public Works (OPW)	
Item No.	Section Ref.	Page No.	Observation Statement	TII Response
OPW Cover Letter - Re: Railway (Metrolink–Estuary to Charlemont via Dublin Airport) Order 2022 – Submissions by the Commissioners of Public Works in Ireland				
3	Cover letter - Legal Requirements	3	<p>There is a further consideration that s.14D of the 1930 Act was inserted by the European Union (Environmental Impact Assessment of Proposed Demolition of National Monuments) Regulations 2012 (S.I. No.249/2012) (the “2012 Regulations”) to give effect to the Environmental Impact Assessment (“EIA”) Directive. The 2012 Regulations require the carrying out of an EIA where a decision to grant consent under s.14(2)(a) of the 1930 Act, or to issue directions under s.14A(4)(d) of that Act, would result in the demolition of a national monument. Thus, where the Minister is considering whether or not to grant a consent or issue directions, as the case may be, and it appears to the Minister that the granting of the consent or the issuing of the directions, as the case may be, would result in the demolition of a national monument but the applicant has not submitted an environmental impact statement (“EIS”) (now an environmental impact assessment report (“EIAR”)) to the Minister, the Minister is obliged to call for an EIAR to be submitted.</p> <p>In particular, given the scale of loss of foliage at Saint Stephen’s Green Park (which is a designated national monument), the proposed project could be deemed to amount to the destruction of part of a national monument and therefore a Ministerial consent will be required under the National Monuments legislation. While this will be required in any event, it is recommended that an express condition be attached to the railway order and have proposed some suggested wording later in this submission.</p>	See response to 3 above.
4	Cover letter - Staged Assessments	3	Therefore, it is imperative that the OPW is afforded an opportunity to input into this critical stage in the process, to protect such significant structures and ensure the success of the project overall for the State. Accordingly, it is recommended that the Bord exercises its power under s.43 of the Transport (Railway Infrastructure Act 2001) and attach a condition to the confirmation of the railway order which requires TII to consult with, (and provide and agree method statements), the OPW in advance of works being carried out. The proposed wording is set out later in this submission.	On the MetroLink Project, the approach to ground movement and building damage assessment follows the industry standard ground movement impact assessment process that is undertaken on tunnelling and underground projects around the world, that includes Channel Tunnel Rail Link (CTRL), Dublin Port Tunnel, Crossrail and High Speed 2. It is possible therefore to assess likely impacts at this stage and the results of these assessments are presented in EIAR Appedix5.17 - with no significant impacts predicted. Please note that tunnelling in London for HS2 similarly impacted sensitive and historic properties and the MetroLink approach to the assessment, consenting and the subsequent construction assurance is similar to the approach adopted there.
5	Cover letter - Staged Assessments	4	The properties for which a Stage 3 assessment is critical are listed in Appendix A.	<p>TII have reviewed the list in Appendix A and confirm Stage 3 assessments will be undertaken for the listed property with the exception of:</p> <p>The Garden of Remembrance - this property lies outside of the 1mm contour; and</p> <p>St Stephen's Green has no structures within the 1mm contour.</p> <p>The stage 3 assessment process is designed for buildings and other structures as described within EIAR Appendix 5.17, not green spaces, pavements etc. TII do recognise why these properties have been included in Appendix A and do commit to undertaking the necessary ground movement analysis, condition surveys and monitoring to ensure that impacts are appropriately managed, recorded and in the unlikely event, remediated as necessary. This is common to all surface elements above the tunnel subject to settlement and includes for example the road surfaces. MetroLink has committed to undertaking ground movement monitoring to ensure that all elements above the tunnel are protected.</p>
6	Cover letter - Staged Assessments	4	In addition, while Stages 4 and 5 are not included in the Railway Order application or EIAR, the OPW considers these stages as key to the success of the project overall. The OPW would welcome the inclusion of the Stages in the process, to facilitate a process of monitoring the necessary mitigations implemented, in advance of closing out the completion of the project. These stages are further described in Appendix D.	The development of monitoring, mitigation and contingency plans, and the subsequent close out of the impacts of settlement will form part of the scope of the Project for the detail design and construct phases and are referred to in the EIAR Appendix 5.1 Outline CEMP. Please note, the development of this detail is not required for the Railway Order and TII intend to develop the detailed specifications and processes to be adhered to by the contractor and this will be included in the contract documentation prepared for that contract. TII notes the description of stages 4 and 5 as included as Appendix D and confirm that the MetroLink Specification will reflect these requirements to achieve the desired outcomes.

Submission No.			This cover letter is common to OPW Submission No.'s 213 to 240.	
Organisation Name or Name of Submitter			Office of Public Works (OPW)	
Item No.	Section Ref.	Page No.	Observation Statement	TII Response
OPW Cover Letter - Re: Railway (Metrolink–Estuary to Charlemont via Dublin Airport) Order 2022 – Submissions by the Commissioners of Public Works in Ireland				
7	Cover letter - Staged Assessments	4	Additionally, any issues arising in Stages 3 and beyond, that result in material changes to the scheme and/or impacts on properties not set out in this current Railway Order Application should necessitate a new, additional Railway Order application, as it is likely to be materially different to that submitted in this current application. Alternatively, the Railway Order should be amended and the OPW would draw the Bord’s attention to s.146D of the Planning and Development Act 2000, as inserted by s.30 of the Planning and Development (Strategic Infrastructure) Act 2006, which allows for the amendment of railway orders.	<p>The On the MetroLink Project, the approach to ground movement and building damage assessment follows the industry standard three-phased ground movement impact assessment process that is undertaken on tunnelling and underground projects around the world, that includes Channel Tunnel Rail Link (CTRL), Dublin Port Tunnel, Crossrail and High Speed 2.</p> <p>The Phase 3 assessment will be a more detailed building specific assessment. A detailed survey will be carried out as part of the Phase 3 assessment to provide the necessary additional information to inform this detailed analysis of how the individual elements of the building would be affected by the predicted ground movements. The method and extent of the detailed analysis will be determined on a case-by case basis and may include a more sophisticated semi-empirical or a detailed soil-structure interaction using finite element modelling methods. Normally a Stage 3 assessment results in lower predicted settlement estimates than the Stage 2 assessment (which is more conservative). It should also be noted that TII will commit to monitoring and mitigation measures will be employed as developed at detailed design and referenced with Appendix 5.1 and 5.17.</p> <p>No OPW structures have been assessed above the "slight" category and hence no structural impacts are predicted. The Phase 2 assessed damage category, contained within this Railway Order, will not be exceeded. If there are unknown conditions that would potentially adversely impact the assessment at Phase 3, the Contractor will be required to implement suitable mitigation to reduce said impacts so as to maintain the Phase 2 assessment damage category. No material change will be permitted.</p>
8	Cover letter - Staged Assessments	4	On a related point, clarity from TII is required on apparent discrepancies between drawings submitted by TII in the Railway Order. In particular, the tunnel alignment on contour drawings appear incorrect in certain places and this is referenced in some of the individual property submissions.	<p>On two drawings (Figures 20.16 Settlement Contours, sheets 27 and 28 of 30) in EIAR Appendix 5.17 Building Damage Report, the tunnel centreline is plainly incorrect as it is deviates from the centre of the settlement contours between Tara and St. Stephen's Green stations. The settlement contours are correct and reflect the proposed Railway Order alignment and as such the drawing serves its core purpose, which is to identify, describe and assess the settlement impact of the railway works. In any event, revised drawings will be submitted to the Board to rectify the error.</p> <p>The correct alignment has been used for all environmental impact assessments including tunnel induced settlement, and construction and operational noise and vibration impact assessments.</p>
9	Cover letter - Property Submissions	4	Building type: All of the historic properties in the Government business district in Dublin 2, in particular, will have varying levels of sensitivity to settlement, vibration, etc. A number of these also house equipment that is sensitive to vibration, noise, etc. and have lower ground operational areas or deep foundations. The OPW would respectfully request that an express condition be attached to the railway order that acknowledges and mitigates any adverse impact on the subject properties.	<p>With regards to settlement, and as noted by response (5), Phase 3 ground movement assessments will be undertaken that will take account of final design and construction methodology details. A detailed survey will be carried out as part of the Phase 3 assessment to provide the necessary additional information to inform this detailed analysis of how the individual elements of the building would be affected by the predicted ground movements. The method and extent of the detailed analysis will be determined on a case-by case basis and may include a more sophisticated semi-empirical or a detailed soil-structure interaction using finite element modelling methods. The results of this refined assessment typically show that earlier assessments are conservative and over estimate the likely impact of construction generated ground movements.</p> <p>As part of the environmental impact assessment baseline data gathering exercise, a letter and questionnaire were sent to identified stakeholders along the alignment to collect relevant data, including equipment contained within buildings that might be sensitive to vibration and Electromagnetic Interference (EMI). Following this, site specific consultation was also undertaken to understand the receptors and concerns. This has informed the EIAR presented with the Railway Order application. For observations raised by OPW regards specific buildings, TII have responded individually to those individual OPW submissions.</p> <p>TII also confirm that any impacts assessed to exceed any acceptable threshold levels will be mitigated so far as practicable. Please note that there are no predicted significant impacts to OPW buildings and structures.</p>

Submission No.			This cover letter is common to OPW Submission No.'s 213 to 240.	
Organisation Name or Name of Submitter			Office of Public Works (OPW)	
Item No.	Section Ref.	Page No.	Observation Statement	TII Response
OPW Cover Letter - Re: Railway (Metrolink–Estuary to Charlemont via Dublin Airport) Order 2022 – Submissions by the Commissioners of Public Works in Ireland				
10	Cover letter - Property Submissions	5	<p>Future developments: The OPW would seek to ensure that the routing of any MetroLink tunnel would not limit the State’s capacity to develop its property - vertically or horizontally - particularly around or below Leinster House, Government Buildings, the National Gallery, the National Museum, and the National Concert Hall complexes. By way of example - the future of the National Concert Hall (NCH) property includes a Master Plan, currently being developed, and envisages a new Children’s Science Museum on the complex. Planning Permission is in place for some extensive developments, including lower levels of buildings that may impact the MetroLink tunnel.</p> <p>The OPW would respectfully request that an express condition be attached to the railway order that acknowledges and mitigates any restrictions on future development of the subject properties.</p>	<p>MetroLink will be a catalyst for and provide opportunity for future development and regeneration. While the MetroLink Railway Order does not include for future neighbouring or overhead development, the tunnels and stations are designed to support appropriate future imposed loads.</p> <p>TII will be required to make submissions in relation to planning applications for proposed future developments on or adjacent to MetroLink and there will necessarily be some engineering constraints (such as permissible loadings) required. However MetroLink is committed to engaging with known development proposals and new development proposals as they emerge with the intent of facilitating such developments as they emerge to the maximum extent consistent with the safe operation of the proposed Project.</p> <p>Again in common with other existing rail and tunnel projects, following grant of the Railway Order and development of detailed design, TII will produce “Guidance Note for Developers” that will be the subject of bye-laws following the grant of Railway Order and which is designed to facilitate future adjacent or over-site development while protecting the integrity and safety of the MetroLink works and operations. It is inappropriate and unworkable to produce this policy at this stage because it would have to be in broad terms that deal not only with the current RO proposal and any contingencies that might arise from the Board seeking revised designs or new conditionality as part of the RO application process.</p> <p>Therefore at this stage TII is dealing with known development proposals on a case by case basis, TII will work with parties in the future to assist with the wider development of sites over and above stations and tunnels. In this context TII has successfully engaged with a number of developers over the last two years to accommodate development over and in proximity to the alignment and there have been no material restrictions on development subject to the implementation of agreed design and mitigation measures and it is not anticipated that MetroLink will have a material impact on the development potential of sites above and in proximity to the alignment in future.</p>
11	Cover letter - Property Submissions	5	<p>Security: The Preferred Route runs beneath the Dáil, Seanad, and Committee Chambers, as well as Government Buildings. A thorough risk assessment from the perspectives of State security will be critical to understanding the implications during any construction and operating phases.</p> <p>The OPW would respectfully request that an express condition be attached to the railway order that acknowledges and mitigates any adverse impact on the security of the subject properties.</p>	<p>There are no predicted material security issues for any of the OPW buildings but the point is understood and agreed. TII propose a meeting is held with the requisite OPW / security experts to discuss potential risks and the management of these risks during the operational and construction phase.</p>
12	Cover letter - property Submissions	5	<p>Vibration, Noise, Electromagnetic Radiation and Interference: The Oireachtas Chambers have extremely low tolerance for any external noise, vibration, or electromagnetic interference during and post construction.</p> <p>The National Museum of Ireland holds the National Archaeological Collection on behalf of the State. The National Collection contains hundreds of thousands of objects including fragile artefacts such as prehistoric ceramic vessels, and Greek and Roman ceramic and glass vessels. The National Gallery of Ireland, in particular, has concerns about the effect of ongoing low-level vibrations on priceless paintings in the State collection.</p> <p>In terms of the National Concert Hall’s activities, the impact of noise and vibration during the construction and operational phases of the MetroLink are matters that would require to be mitigated.</p> <p>The former Department of Arts, Heritage and the Gaeltacht had previously expressed to the OPW the significant concerns of the Boards of Governors of the Cultural Institutions (the National Gallery, the National Museum, the National Library and the National Concert Hall).</p> <p>The OPW would respectfully request that an express condition be attached to the railway order that acknowledges and mitigates any adverse impact on the subject properties.</p>	<p>As confirmed by response (9) above, for identified stakeholders, information requests were made to complete questionnaires listing potentially sensitive equipment. Predominantly stakeholders listed standard electrical and electronic items such as phone systems, hard drives etc. These types of equipment are discussed within the EIAR and evaluated to not be at risk of interference from electromagnetic radiation (DC, AC or RF fields) from the proposed Project.</p> <p>Visits to the sites of the Oireachtas and the National Concert Hall were also undertaken. The outcome of the responses and follow up consultations are covered by EIAR Chapter 12 Electromagnetic Compatibility and Stray Current, and are summarised below.</p> <p>In relation to the Houses of the Oireachtas. This site was identified as a major stakeholder with respect to Electromagnetic Interference (EMI) and given specific consideration in relation to potential impacts within the EIAR. The committee rooms within the Houses of the Oireachtas were identified as being the closest location within the site to the proposed alignment. A location that contained IT equipment and more notably audio visual equipment. The IT systems are not at risk of interference from the proposed development due to the need for the proposed development to meet the emissions requirements of the Electromagnetic Compatibility (EMC) Directive. Likewise, the IT systems themselves will be CE marked against the EMC Directive and therefore are immune to any emissions from the proposed development throughout the frequency ranges within the scope of the directive. In relation to the audio visual systems (including the induction loop system); These are also required to meet the EMC Directive with specific immunity testing applied in the audio frequency range as part of their approval process at specific levels. Modelled levels for AC fields from the proposed development in the audio frequency range indicate that they will not exceed the standard levels to which approved equipment will be immune and therefore no</p>

Submission No.			This cover letter is common to OPW Submission No.'s 213 to 240.	
Organisation Name or Name of Submitter			Office of Public Works (OPW)	
Item No.	Section Ref.	Page No.	Observation Statement	TII Response
OPW Cover Letter - Re: Railway (Metrolink–Estuary to Charlemont via Dublin Airport) Order 2022 – Submissions by the Commissioners of Public Works in Ireland				
				<p>interference is expected to occur on this equipment.</p> <p>The National Concert Hall (NCH) was also identified as a major stakeholder and is discussed individually within the EIAR. Similar to the Houses of the Oireachtas the identified equipment that would potentially be most at risk was audio visual equipment within the site. The distances involved relative to the line (further than the Oireachtas) indicate that there is no risk of interference with their onsite equipment (audio visual, IT or otherwise) due to such equipment being required to meet the EMC Directive as part of their CE marking process. Musical instruments that may be present on this site that would not be owned by the NCH which may incorporate magnetic pickups such as electric guitars. These are the most at risk equipment as the pickups are not tested for immunity to the Directive in the audio frequency range. They are specifically designed to be sensitive to these frequencies. However, given the distance from the proposed alignment, modelling indicates that no interference will be detected by these instruments, which will be more vulnerable to sources in their more immediate environment such as building wiring and lights. (This typically manifests itself as the acoustic phenomenon known as “mains hum”).</p> <p>No vulnerable audio visual or other types of electrical equipment were identified for the National Gallery, the National Museum or National Library, but the same rationale will apply to these locations. Adherence to the EMC Directive will ensure that no interference will be experienced at any of these sites on their IT or audio visual systems as a result of EMI.</p> <p>Note: for equipment that is deliberately designed to transmit and receive radio frequency radiation (e.g. mobile phones) there is an additional directive that governs these, that is also compulsory known as the Radio Equipment Directive. Combined with the EMC directive, the risk of interference at the identified OPW sites is negligible with the risk only rising if the aforementioned directives, have not been adhered to.</p> <p>Regarding the assessed impact of noise and vibration, please refer to the particular responses to the observations made with regards particular buildings;</p> <p>The Oireachtas Chambers (No. 230) The National Museum of Ireland (No. 236) The National Gallery of Ireland (No. 233) National Concert Hall (No. 232) National Library (No. 235)</p> <p>TII also confirm that any impacts assessed to exceed acceptable threshold levels will be mitigated so far as practicable.</p>
13	Cover letter - Property Submissions	6	<p>Potential impacts to National Monuments:</p> <p>St. Stephen’s Green Park: The OPW acts on behalf of the relevant Minister in the operation, care and maintenance of St. Stephen’s Green Park; and so shares the concerns of our colleagues in the Dept. of Housing, Local Government & Heritage that the proposed station location would have a direct, severe, negative, profound and permanent impact on the heritage value of the Green.</p> <p>As presented, the proposals would not seem sufficiently sympathetic to the history and environment of the spaces within and around the Green. The OPW would urge An Bord Pleanála, when considering any Railway Order Application, to also consider the unique, inherent importance of St Stephen’s Green Park to the people of Dublin and in light of the specific legal protection which has been identified above.</p> <p>Moore Street/Moore Lane: The impact on the national monument properties on Moore Street now appears to be very significant, in particular in relation to the ‘cut and cover’ works zone proposed for the Metrolink station box. The proposed development works are very close to the boundary of the monument and includes the public roadway, Moore Lane, behind the monument site. There are also likely to be serious and lengthy impacts and disruption to the operation of a new centre of commemoration planned for the site, with a substantial State investment due to be made over the coming years.</p>	<p>St Stephen's Green Park</p> <p>TII have a full understanding of the unique inherent importance of St Stephen's Green Park to the population of Dublin and to visitors to the city as presented in the baseline section of the relevant chapters in the EIAR, including Chapters; 25 Archaeology and Cultural Heritage (ACH211 in Table 25.6), 26 Architectural Heritage (section 26.4.4.14) and 27 Landscape (section 27.4.2.23). TII also recognise the importance of St. Stephen's Green as a National Monument.-</p> <p>As a result, TII initiated consultation early in the Project in order to initiate a collaborative approach with the OPW to maximise the protection of St. Stephen’s Green whilst also providing a key station for MetroLink in this area. TII have undertaken significant assessment of alternative options for the MetroLink station as presented in Chapter 7 Consideration of Alternatives of the EIAR (refer to section 7.7.10.10, New Metro North Alignment Options Report (TII 2018), and appendices; A7.5, A7.7 and A7.8). Options assessed include alternative MetroLink alignment options through this area with alternative station locations, alternative station locations at St. Stephen's Green East, and alternative construction methodologies, including mining.</p> <p>The protection of the Park was carefully considered as well as the location of the station to ensure that St Stephen's Green East continues to function as an important transport route, as an important corridor for critical utilities such as water, electricity and sewage, and as an important location for commercial and business activities. Ensuring this critical functionality on this side of St. Stephen's Green would have been prolonged and very difficult to achieve with a station that was located entirely outside of the Park in St. Stephen’s Green East.</p>

Submission No.			This cover letter is common to OPW Submission No.'s 213 to 240.	
Organisation Name or Name of Submitter			Office of Public Works (OPW)	
Item No.	Section Ref.	Page No.	Observation Statement	TII Response
OPW Cover Letter - Re: Railway (Metrolink–Estuary to Charlemont via Dublin Airport) Order 2022 – Submissions by the Commissioners of Public Works in Ireland				
				<p>Appendix A 7.5 to the EIAR presents an analysis of the alternative construction methodology of mining the station which would allow for construction of the station with a smaller footprint at ground level. However, these options were ruled out as they would increase the construction phase (and as a result environmental impacts) by between 2 and 3.75 years and they would ultimately make it not possible for the Project to achieve its objectives of providing a high-quality operational station.</p> <p>The preferred station location of St. Stephen's Green East was therefore chosen as it minimises the temporary impacts on the park (occupying c. 5% of the Park area during the construction phase, reducing to 0.21% of the Park during the operational phase). Appropriate mitigation measures will ensure that all elements of heritage are reinstated following the construction phase. In addition, the location of the Station was chosen and carefully designed to ensure that the St Stephen's Green East continues to function as an important transport route, as an important corridor for critical utilities such as water, electricity and sewer, and as an important location for commercial and business activities.</p> <p>On completion of the construction phase, reinstatement of heritage items and replanting (and reestablishment) of trees, TII maintains that the proposed St. Stephen's Green Station will enhance this area allowing Dubliners and visitors alike to experience high quality public transport access to St. Stephen's Green and to this area of the city, thereby reducing car dependency, noise levels and improving air quality while allowing citizens to enjoy St Stephen's Green long into the future.</p> <p>Moore St/Moore Lane</p> <p>EIAR Chapter 26 Architectural Heritage, Table 26.56 identifies that the significance of effect on the national monument properties on Moore Street as "Very Significant", in the absence of any mitigation. The potential for (unmitigated) effects is due to traffic movements to and from the site, and not due to any direct impacts from the construction of the station box. Table 26.6 of the same chapter identifies mitigation measures that will reduce the potential effects to imperceptible. These mitigation measures include the provision of an exclusion zone around 14-17 Moore Street extending to Moore Lane, while the structures adjacent to the haul routes will be protected from potential damage by means of the installation of strong hoardings during construction. Monitoring for settlement, and groundborne noise and vibration will also be in place to ensure there are no exceedances of set limits. In the event of a monitoring trend breaching a pre-determined trigger level, works will stop in the vicinity of the site until the cause of the issue can be resolved and mitigated.</p> <p>There is no detail available on the new 1916 centre of commemoration to allow mitigation measures be developed. However, TII are happy to engage with OPW to facilitate the development within the constraints of the Railway Order. It is also worth noting that at the operational stage, MetroLink will make the 1916 commemoration centre more accessible.</p>
14	Cover letter - Legal Agreements	6	<p>The Commissioners of Public Works would seek to enter into appropriate, property specific legal agreements with TII, to ensure the protection of key State properties and of the State’s activities undertaken within those and other properties. Given the importance of such properties and activities, the Commissioners of Public Works consider it appropriate that An Bord Pleanála would make the Railway Order conditional on such legal agreements being in place between TII and the OPW. Creating such legal agreements between TII and the OPW would be possible only after TII make available the more detailed design and risk-mitigation measures for the construction and operational phases of the MetroLink project, and before any development begins. Therefore, the OPW would request that this aspect be reflected in the conditions set out by An Bord Pleanála to TII, as this would provide assurances to the Commissioners of Public Works relating to future legal agreements that protect and secure State property and activities from risks associated with the construction or operations of the MetroLink.</p> <p>In that regard, the OPW would suggest wording for conditions as follows (or such equivalent wording as the Bord determines appropriate). In respect of the need to ensure compliance with the National Monuments Acts:</p> <p>“Prior to commencement of development, TII must ascertain whether the proposed Metrolink project will potentially result in the total or partial destruction of any national monuments and, if so, must comply with the requirements of s.14 of the National Monuments Act 1930, as amended,”</p>	<p>This condition is unnecessary, as it simply restates what TII is required to do by law. The statutory references will also likely be out of date by the time it comes to construction. TII proposes no condition or a condition that requires it to comply with any applicable statutory requirements for the protection of national monuments.</p>

Submission No.			This cover letter is common to OPW Submission No.'s 213 to 240.	
Organisation Name or Name of Submitter			Office of Public Works (OPW)	
Item No.	Section Ref.	Page No.	Observation Statement	TII Response
OPW Cover Letter - Re: Railway (Metrolink–Estuary to Charlemont via Dublin Airport) Order 2022 – Submissions by the Commissioners of Public Works in Ireland				
15	Cover letter - Legal Agreements	7	<p>In terms of the sensitivity of the uses within many of the properties referenced in the submissions, coupled with their historic importance, the OPW respectfully requests that An Bord Pleanála consider attaching conditions to the Railway Order that ensures continuous monitoring of those properties to prevent any negative impacts. This is referenced further in the individual submissions.</p> <p>In that regard, the following wording is proposed:</p> <p>"Prior to commencement of development, TII will prepare detailed method statements which shall be submitted to the relevant planning authority for agreement by the planning authority. Insofar as the proposed works affect any State properties, TII shall consult and agree with the Commissioners of Public Works, and other impacted State bodies, any method statements prior to submitting to the relevant planning authority for agreement".</p>	<p>TII confirm that monitoring of all potential environmental impacts along the route within the zone of influence of the Project will take place. The will include baseline monitoring, construction phase monitoring and close out monitoring, with monitoring trigger levels set so that the risk of breaching environmental limits is avoided.</p> <p>TII does not consider it is necessary or appropriate in general to submit method statements to the planning authority or to OPW post granting of an Enforceable Railway Order. TII are agreeable, and consider it correct, that method statements that pertain to works that directly impact OPW property (e.g. condition surveys, monitoring installation) are submitted to OPW for consent. Where works have the potential to indirectly impact on OPW due settlement, noise, vibration etc, TII will consult with OPW, provide details of the proposed works (which will be assured by TII) and provide the results of any monitoring requested.</p>
16	Cover letter - Legal Agreements	7	<p>The OPW would also welcome the following condition to ensure that there is appropriate monitoring of the effects of the proposed Metrolink project on State parties:</p> <p>"TII will be required to monitor the physical impacts of the proposed Metrolink project and future operations, on State properties in terms of noise, vibration, business interruption, loss of ecological and amenity value and submit reports (of a nature and to a standard agreed with the Commissioners and, as necessary, their clients at intervals to be agreed), to both the OPW and the relevant planning authority".</p>	<p>Please refer to response (15) above with regards to the monitoring of environmental impacts.</p> <p>Information on monitoring during the construction phase is outlined in Section 4.2.2 of Appendix A5.1 Outline CEMP of the EIAR. A number of documents will be provided by the Contractor and incorporated into the detailed CEMP and can be seen within Section 1.3 of the same document as above. TII will consult with the OPW and its clients in relation to final details of all monitoring affects properties and buildings under OPW’s management. This monitoring information to be provided to the planning authority will be agreed separately with the planning authority.</p> <p>TII will consider any proposals from OPW in relation to appropriate monitoring of business interruption and amenity value.</p>
17	Cover letter - Flood Risk Management	7	<p>As the Bord may be aware, the Guidelines on the Planning System and Flood Risk Management (DHPLG/OPW, 2009) set out a transparent framework for the consideration of flood risk in the planning processes, including planning applications and development management. The Guidelines stress the need for a proportionate assessment of the flood risk, taking into account the potential impacts of climate change, and the need for the management of flood risk for development in flood-prone areas.</p> <p>The Climate Change Sectoral Adaptation Plan for Flood Risk Management (OPW, 2019), that was approved by Government in October 2019, further emphasises the need for the consideration of the potential impacts of climate change on flooding and flood risk in the planning and design of future assets. The Metrolink will be a highly valuable piece of critical infrastructure that may well be highly vulnerable in the event of inundation, and as such, taking account of the policies referred to above, a detailed flood risk assessment might be expected of fluvial, coastal and pluvial flood risks (in addition to sealing against groundwater), with any flood risks, such as via inflow from station entrances, ventilation systems, etc., managed to a suitably high standard of protection (e.g., the 0.1% annual exceedance flood event probability), taking account of the potential impacts of climate change.</p>	<p>EIAR Chapter 18 Hydrology summarises the outputs of the Flood Risk Assessment (FRA) undertaken for the Project. The full FRA is presented in EIAR Appendix A18.5 and has been undertaken in line with the requirements of The Guidelines on the Planning System and Flood Risk Management (DHPLG/OPW, 2019). With reference to these guidelines, the proposed Project is assessed as being "essential infrastructure such as primary transport" and is therefore assessed as being a "Highly vulnerable development". Furthermore, the calculations informing the FRA have taken into account potential increases in flow due to climate change (20%), and the Project has been designed to ensure no inundation of the system up to a 1 in 1000 year event (0.1% annual exceedance flood event probability).</p> <p>As outlined in section 18.2.2.2, Summary of Stormwater Discharge Flows and Flood Risk Management, climate change corrections (as per OPW 2019) have been included in the attenuation design, and all bridge structures and culverts have been designed to convey flows considering climate change (section 18.6.1.2 and section 18.6.1.3).</p>
18	Cover letter - Appendix A	9	List of properties that require Stage 3 and further Stage assessments:	Please refer to response (5) above.
19	Cover letter - Appendix D	12	Appendix D – Ground Movement Assessment	<p>TII have reviewed Appendix D and would note that this appears to be an extract from a typical contract specification. TII confirm that its main works contracts will include for something very similar to achieve the outcomes set out by this sample specification. TII would also note that much of this work is already progressing, including the equivalent of the Stage 1 and Stage 2 assessment and the adoption of the building damage classification system. TII have taken a different approach to assessing the impact on buildings that are deemed potentially sensitive to movement or of particular cultural or historical significance as set out by responses (5) and (9) above, but consider that the outcome of assuring the protection of such property is the same, noting that TII have already committed to progressing the OPW buildings listed in Appendix A to a Stage 3 Assessment. Regards Stage 4 and 5, please refer to response (6) above.</p> <p>With regards to "Contingency plans will be developed and agreed with the OPW to cover the risks posed to the OPW before commencement of the construction activity", TII will consult with OPW and provide the assurance that appropriate contingency plans are in place to cover risks posed to OPW.</p>

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
1	Executive Summary	N/A	The OPW has had ongoing engagement with TII regarding the MetroLink. However, the concerns expressed on the negative impact of these designs on the Green have not resulted in an option which the OPW believes will ensure the protection of this cultural and historic monument for current and future generations. The option studies have been reviewed by the OPW and its engineering consultants would question some of the key assumptions adopted to reach their conclusions.	TII have undertaken significant assessment of alternative options for the MetroLink station as presented in EIAR Chapter 7 Consideration of Alternatives (refer to section 7.7.10.10, New Metro North Alignment Options Report (TII 2018), and appendices A7.5, A7.7 and A7.8). This analysis considered potential environmental effects on St. Stephen’s Green Park, potential effects on buildings on the east and north sides of St. Stephens Green, on traffic and transport along St. Stephens Green East, and on critical utilities serving large areas of the city located under the road at St. Stephen’s Green East.	
2	Executive Summary	N/A	<p>The current proposal is to site a station within the Green and the EIAR identifies the significant effect that this will have on this National Monument:</p> <ul style="list-style-type: none">• Chapter 25 Archaeology and Cultural Heritage characterises the effect as very significant direct negative (permanent) during the Construction Stage and very significant indirect negative during Operation Stage.• Chapter 26 Architectural Heritage characterises the effect as profound direct negative during the Construction Stage and very significant indirect negative during Operation Stage.• Chapter 27 The Landscape characterises the effect as very significant negative during the Construction Stage and very significant negative during Operation Stage.	<p>Options assessed include alternative MetroLink alignment options through this area with alternative station locations, alternative station locations at St. Stephen’s Green East, and alternative construction methodologies such as mining. The preferred station location of St. Stephen’s Green East was chosen as it minimises the potential impacts on the Park when compared to other options with a larger footprint in the Park. The preferred option occupies c. 5% of the Park area during the construction phase, reducing to just 0.2% of the Park during the operational phase. In addition, all heritage features such as monuments, railings, bollards, and paving stones can be fully reinstated following the construction phase.</p> <p>Appendix A 7.5 to the EIAR presents an analysis of the alternative construction methodology of mining the station which would allow for construction of the station with a smaller footprint at ground level. However, these options were ruled out as they would increase the construction phase (and as a result environmental impacts) by between 2 and 3.75 years and they would ultimately make it not possible for the Project to achieve its objectives of providing a high quality operational station.</p> <p>The location of the station has been chosen and carefully designed to ensure that St Stephen’s Green East continues to function as an important transport route, as an important corridor for critical utilities such as water, electricity and sewage, and as an important location for commercial and business activities. Ensuring this critical functionality on this side of St. Stephen’s Green would have been prolonged and very difficult to achieve with Location 8 that was located entirely outside of the Park. This option also negates the potential for direct impacts on properties to the east side of St Stephens Green East road, on critical utilities including a major Victorian sewer, and on the roadway which is an important access route to the city centre, particularly for public transport.</p> <p>It is acknowledged in Chapter 27 of the EIAR that the reinstatement of trees removed will take a significant period of time to re-establish. However on completion of the construction phase, reinstatement of heritage items and replanting (and reestablishment) of trees, TII maintains that the proposed St. Stephen’s Green Station will enhance this area by providing Dubliners and visitors alike with high quality public transport access to St. Stephen’s Green and to this area of the city, thereby reducing car dependency, noise levels and improving air quality, while allowing citizens to enjoy St Stephen’s Green long into the future.</p>	
3	Executive Summary	N/A	Section 27.5.4.113 of the EIAR acknowledges that: “the proposed works can apply a level of mitigation which would go some way to reinstating the disturbed part of ‘the Green’, however, beyond any potential for reinstatement, replacement, or restoration, it would be difficult to offset impacts on the maturity and wholeness of this place.” Further noting that: “Once the reinstatement works are completed the severe negative effects of construction will be partially moderated, however the edge of the park along the section of required works, will appear rather raw, small-scaled and immature, especially when directly compared with the remaining untouched sections. These contrasts will reduce over time, though it may take a significant period before they may be described as imperceptible.” Review of the supplied photomontages (V22.1–V22.6) further reinforces this assessment of the long-term impact to the Green.	<p>EIAR Chapter 27, The Landscape, section 27.5.4.23 identifies that there will be a very significant temporary impact on the Landscape due to the loss of trees in the area of St. Stephen’s Green East if mitigation measures are not deployed. However with the proposed mitigation measures relevant to this location in place, summarised below, this temporary impact can be mitigated by:</p> <p>(1) Development of site specific and comprehensive proposals for hard and soft landscape works, including for trees ensuring effective retention of mature trees where possible. Details of such planting proposals will be provided for agreement with OPW in advance of the construction phase. These will include: details of the tree species mix, numbers, density and sizes proposed; the tree preparation, presentation, transportation, lifting and placement techniques proposed, as well as; the proposed ground preparation, rootball securing technique, backfill materials and methods, and the specific establishment maintenance proposals for each. These measures will minimise the risk to tree establishment and maximise their viability and future rates of growth.</p> <p>(2) In sensitive locations such as St. Stephen’s Green, residual landscape and visual effects will be significantly reduced through the inclusion in the proposed planting of relatively mature specimen trees. Furthermore, while the removal of trees from the landscape will initially have a significant impact if left unmitigated, especially in the case of old and developed trees as the replacing material (saplings) can never have the same size and development as the mature original trees that have been removed, resulting in an initial, but temporary contrast between the original established area of trees and the new planted trees area. Over a period of time this contrast will reduce and eventually become imperceptible.</p>	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
				While the temporary impact on trees is considered very significant, it does occur over a localised area of the Park that amounts to only 5% of the total area of the Park, impacts 64 trees in the Park, and is confined to the east side (adjacent to the Park fence line) of the Park only. TII are therefore of the view that the construction of St. Stephen's Green Station will not have a significant impact on the overall amenity and function of the Park during construction, given only 5% of the Park area is taken during the Construction Phase, and that once construction is completed, this area is returned to the Park, with only 0.2% of the total Park area taken by MetroLink when operational, whilst providing further access to, and reinforcing that St. Stephen's Green is a key Dublin landmark and destination.	
4	Executive Summary	N/A	<p>While certain mitigation measures are outlined within the EIAR, the residual effect, even taking account of these actions, remains very significant and permanent through both the Construction and Operation Stages. Construction of the station as currently proposed will result in permanent change to the architectural form of the Green, increased hard landscaping, introduction of upstanding structures into the footprint of the park and loss of mature trees and canopy.</p> <p>This will result in long-term, permanent impact on the amenity and setting of this National Monument and urban park which plays a unique role in defining the city centre core and in supporting quality of city centre life for citizens of Dublin.</p>	<p>The design of the proposed station at St Stephen's Green has been developed to minimise any structures within the Park. The existing plaza area to the north east corner of the green will be retained, but aside from that, areas of hardstanding will be minimal with the proposed Project having new structures/elements within the Park occupying just 0.2% of the park area. On completion of the construction phase all heritage items will be reinstated and all trees lost will be replaced.</p> <p>While it is acknowledged that the trees will take a significant period of time to re-establish with a significant impact on the landscape amenity as reported in Chapter 27 of the EIAR, the fact is that just 64 trees will be removed (and replaced). Appendix A27.3 Arboricultural Impact Assessment notes that of the 64 trees to be felled: 15 of the trees were found to be a state of decline and recommended to be removed, 14 of the trees were of low quality, 45 of the trees are moderate quality and only 5 were found to be of the highest quality. TII maintains that the proposed St. Stephen's Green Station will enhance this area allowing Dubliners and visitors alike high quality public transport access to St. Stephen's Green and to this area of the city, thereby reducing car dependency, noise levels and improving air quality while allowing citizens to enjoy St Stephen's Green long into the future.</p>	
5	Executive Summary	N/A	<p>The OPW notes that in The St. Stephen's Green Station – Mined Options Report (EIAR Appendix A7.5), the current preliminary design performs worst with “regards to ‘Property Impact on SSG Park’, ‘Biodiversity’, ‘Landscape and Visual’, ‘Archaeology/Cultural Heritage’, and ‘Architectural Heritage’ criteria”.</p>	<p>When TII have evaluated alternatives and options, including for St. Stephen's Green Station, impacts and benefits, both short-term temporary construction (considering the operational life span of the Project), and long-term permanent (operational phase of the Project) have to be carefully balanced, considering a wide range of criteria that cover Project Objectives, Environment, Engineering and Economy (E.g. programme and risk).</p> <p>It is not appropriate to focus solely on a particular evaluation criteria in isolation since this will not result in the optimum solution / option being selected. In the case of St. Stephen's Green Station, while TII acknowledge that the preferred station location and construction methodology for the station is not the least environmentally impactful solution for St. Stephen's Green Park, when this is balanced and considered against the long-term strategic need for and operability of the Station / MetroLink, the mined solutions are deficient in terms of; a construction programme resulting in a significant increase in the duration of MetroLink construction and environmental impacts, and not achieving the project objectives of providing a high-quality operational station, (deeper station, increased passenger walking distances and a adverse impacts on the station ventilation strategy) resulting in a very long-term permanent degradation of the MetroLink Project. This is compared to what TII would consider is a temporary impact to a very limited area of the Park that can be mitigated, and in the permanent long-term case the Park can be returned to its existing condition.</p> <p>Attention is also drawn to EIAR Chapter 7, Consideration of Alternatives of the EIAR, and in Appendices to the Chapter (A7.3, A7.5, A7.7 and A7.8). It is very important to recognise and is evident, that a significant level of analysis was undertaken to identify alternatives, 16 alternatives (10 cut and cover, 6 mined) in total were considered. Each were assessed against multiple criteria to inform the determination of the preferred station location for St. Stephen's Green. This analysis considered potential environmental effects on St. Stephen's Green Park, potential effects on buildings on the east and north sides of St. Stephen's Green, on traffic and transport along St. Stephens Green East, and on critical utilities serving large areas of the city located under the road at St. Stephen's Green East. The analysis identified that the proposed station location on St Stephen's Green East partially under St. Stephen's Green Park is the preferred option because it effects just 5% of the Park area during the construction phase, reducing to 0.2% of the Park area following full re-establishment, whilst providing a station that operationally meets the requirements of the Project over its lifetime. In addition, all heritage features such as monuments, railings, bollards, and paving stones can be fully reinstated following the construction phase. This option also negates the potential for direct impacts on properties to the east side of St Stephens Green East road, on critical utilities including a major sewer (a critical piece of infrastructure) serving the Dublin population, and on the roadway which is an important access route to the city centre, particularly for public transport.</p>	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
6	Executive Summary	N/A	<p>The OPW believes that as per the Consideration of Alternatives (EIAR Chapter 7 and Appendices A7.3–A7.5; A7.7–A7.8), the proposed location for the station at the Green is not the only viable option. The St. Stephen’s Green Station Options Assessment Summary (EIAR Appendix A7.8) notes that: “Of the 16 alternatives considered [including Preferred Design], location 8 and mined options 1 and 3 were considered viable [in addition to the Preferred Design].”</p> <p>The likely overall impact on the Green would be substantially reduced, if any of these three alternatives are adopted, with certain specific potential impacts eliminated or considerably reduced in scale and scope.</p> <p>It also states that “[Mined] Option 3 performs the best in terms of minimising the impact on St. Stephen’s Green Park both during the construction and operational phases, noting that during the construction phase the Park’s railings would be removed temporarily to ensure they are protected. In contrast Option 0, the current Preliminary Design performs the worst by a considerable margin both during the construction and operational phases of the station compared to the other options, which includes for during construction a haul road and logistics being located within the Park, and five ventilation ‘pop ups’ in the permanent case (operational phase). [Mined] Option 1, construction and permanent land take is confined to the Plaza area of the Park and also necessitates the removal of a section of the Parks railings.”</p>	Please refer to response (5) above.	
7	Executive Summary	N/A	<p>The OPW is of the view that in selecting the location and design for the station at the Green, as currently proposed, consideration of the overall effect to this National Monument (encompassing factors such as property impact, social, landscape, amenity, archaeology /cultural heritage, and architectural heritage) has not been given appropriate weighting.</p>	TII do not agree with this statement for the reasons set out by the above responses.	
8	Executive Summary	N/A	<p>The OPW is of the opinion that the proposed station option has prioritised construction requirements, uniformity of station design and construction methodology, programme, and cost considerations above a sufficiently weighted assessment of the long-term impacts on the Green.</p>	TII do not agree with this statement for the reasons set out by the above responses.	
9	Executive Summary	N/A	<p>The proposals as outlined have a significant impact on the longer-term biodiversity of the Green. Of the 800 trees growing within the Green, 225 will possibly be impacted by this Project. The proposal to fell 64 trees, along with the potential impact on numerous other trees within this National Monument will permanently damage one of Ireland’s favourite Parks. Thus, the MetroLink, as proposed, risks fundamentally altering the special character of the Green and the changes will be visible for generations to come.</p>	Please refer to responses (1) and (3) above.	
10	Executive Summary	N/A	<p>In conclusion, St. Stephen’s Green Park is a significant tourist attraction, with in excess of 4 million visitors on an annual basis and fulfils a critical social and amenity function at the core of the city centre. It is a National Monument which has played a significant role in Ireland’s history, including during the 1916 Easter Rising. While the OPW supports the objective of modern Metro infrastructure for Dublin and the State, delivery of this objective cannot be at the expense of Ireland’s national heritage.</p>	<p>For the reasons set out by the above responses, TII have carefully considered the impacts on the Park and balanced these with providing a high quality metro system that will serve Dublin for many years to come.</p> <p>TII are aware of the importance of the St. Stephen’s Green Park to Dublin and maintains that the proposed St. Stephen’s Green Station will enhance this area allowing Dubliners and visitors alike high quality public transport access to St. Stephen’s Green and to this area of the city, thereby reducing car dependency, greenhouse gas emissions, noise levels and improving air quality while allowing citizens to enjoy St Stephen’s Green long into the future. Furthermore, the permanent footprint of the proposed Project within the Green is very minor and it is considered that it will not permanently damage the heritage value of the Park. It is also important to note that the limited footprint of the works area to the east of St. Stephen’s Green Park, will allow the majority of the Park area to be enjoyed fully by tourists and locals during the construction phase.</p>	
11	Executive Summary	N/A	<p>The proposed plans do not appear to strike the right balance between the transport needs of the modern state and the protection of national heritage for citizens.</p> <p>The OPW therefore recommends that careful consideration be given to alternative station locations and/or alternative construction methodologies for the proposed station at St. Stephen’s Green. Such consideration should encompass all of the issues raised above.</p>	<p>TII maintain that careful consideration of alternative alignment options, alternative station locations and alternative construction methodologies has been undertaken already to advise the preferred station location as outlined in Chapter 7 of the EIAR and supporting appendices (A7.3, A7.5, A7.7 and A7.8) and the above responses.</p>	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
12	Executive Summary	N/A	Section of St. Stephen’s Green directly affected by the Project, highlighted in red. Section of St. Stephen’s Green likely to be negatively impacted by the Project, highlighted in orange.	The image presented in the executive summary of the accompanying report is very misleading. It appears from the image and from the references in the submission to show "225 trees being potentially negatively impacted" and that the OPW have reviewed the Arboricultural impact assessment and identified that because trees have been surveyed as part of the project (225 of them), these trees are potentially going to be negatively impacted. This is not the case. The potential impacts identified within the relevant chapters of the EIAR are based on the identified fact that 64 trees will be felled (and replaced after completion of construction), and that all other trees within the Park will be retained and not be impacted. Furthermore the proposed construction of the station at St. Stephen's Green will occupy a maximum of 5% of the Park area and as such will not preclude the Park outside of this area being used as normal.	
13	3.0 Overview of the Draft Railway Order	11	While extensive pre-planning consultations also took place between TII and the OPW, a detailed assessment of the individual properties affected has not yet taken place. The Draft Railway Order application 2022 is a Draft Order, and should the route be approved by An Bord Pleanála, further detailed design will be submitted which will require further consideration and approval. Factors such as the internal uses of the properties, their construction methods, age and historical importance and the effect of construction on these sensitivities has not been assessed as part of the Project thus far. Additional consideration needs to be given to the potential effects on the built environment before a route and construction method can be confirmed. The OPW reserves the right to make further commentary, pending more detailed design proposals.	TII disagree with this unparticularised assertion that inadequate consideration has been given to the effects of MetroLink on the properties referred to. The level of design that has been undertaken by TII is sufficient to allow the Board to identify, describe and assess the significant impacts of the project on the environment, to describe and evaluate appropriate mitigation measures and monitoring arrangements. The EIAR chapters address the potential impacts, and where appropriate their mitigation, along the entire alignment of the Project and thus supports the proposed Railway Order application. Should an Enforceable Railway Order be granted, detail design for construction will be undertaken, which will finalise matters of detail left over by the Railway Order, including the application of monitoring and mitigation measures to the internal use, construction method and age of the properties. TII will work closely with OPW in relation to this monitoring and mitigation measures and the development of method statements for the works. Having specific regard to MetroLink’s construction methods and their impacts on building sensitivities, TII would note that the following EIAR chapters; (1) Chapter 14 Groundborne Noise & Vibration and supporting appendices where a full assessment of ground noise and vibration on all buildings along the alignment are included. (2) Appendix A5.17 presents an analysis of the settlement risk associated with underground construction. (3) Chapter 12 (and supporting appendices) which presents the details of the proposed EMI/EMC impacts associated with the operation of MetroLink system along the entire project length and (4) Chapter 26 which presents the potential impacts on buildings of architectural heritage value having regard to direct impacts and indirect impacts arising from vibration and settlement.	
14	4.2 Historical Context / Conservation Status	14	According to the Dublin City Council’s Record of Protected Structures, there are several protected structures within the Green, which further highlights the historical significance of the park.	TII note the historical significance of the park. This has been reflected in the assessment carried out as part of the EIAR. As explained by EIAR Chapter 26 Architectural Heritage, a number of structures of architectural heritage significance will need to be removed and placed into safe storage. This includes sections of the Park railings, bollards, lamp standards and paving outside the Park railings, the Wolfe Tone monument, and the Famine sculpture and trees within the Park and outside it. Within the Park there are short stretches of railing bordering the entry to the Park from the gates on the eastern perimeter, and there are low iron railings bordering the paths alongside the lawns; these will also have to be removed within the construction area. The railings, gates and plinth walls will be removed by a specialist heritage contractor in accordance with a method statement to be prepared by the Project Conservation Architect (PCA), brought into secure storage for the duration of the works and conserved as necessary. At the completion of the construction of the station, the railings, plinth wall and gates will be reinstated in their original locations in accordance with a method statement prepared by the PCA. The OPW and the Minister’s office (Housing) will be consulted on the method statement prior to commencement of works.	
15	4.3 Current Use/Uses	17	Over sixteen commemorative statues and memorials, representing many strands of Irish history and culture are located within the Green.	Please refer to response (14) above.	
16	4.3 Current Use/Uses	17	Key Events include: - ▪ Annual family day event including storytelling, archaeology, garden tours, historical re-enactments, kids’ activities, etc. ▪ Permit in excess of 200 photoshoots for business, charity events and weddings. ▪ International band performances including Tango/swing/salsa dance exhibitions. ▪ Annual Art and photographic exhibitions. ▪ Primary teacher training Courses in association with St. Pats Teacher Training College, Drumcondra. ▪ Schools educational programme including Tree Day/Tree Week in conjunction with local schools and The Tree Council of Ireland. ▪ Links with local 2nd and 3rd level colleges for student projects. ▪ Specialized gardens and historical tours. ▪ Yoga/fitness classes. ▪ Little Dublin Museum weekly tours in the Green.	The proposed construction of the station at St. Stephen's Green will occupy a maximum of 5% of the Park area and as such will not preclude any of these events occurring in the remainder of the Park area.	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
17	4.3 Current Use/Uses	17	An important characteristic of the landscape is the screen of trees and shrubs on the perimeter, which blocks out many of the sights and sounds of the bustling city, while offering a relatively quiet and peaceful oasis in the centre of the city.	It is acknowledged that the loss of trees on St Stephen's Green East will have a significant impact on the landscape and visual amenity in the area. However this will be mitigated by planting mature and semi-mature trees to replace the existing trees, to shorten the period of re-establishment. Please also refer to response (3) above. It should also be noted that vegetation is not an effective barrier to noise transmission and so the removal of vegetation will not have a significant effect on noise levels within the Park. Also noted within Appendix A27.3 Arboricultural Impact Assessment, of the 64 trees to be felled: 15 of the trees were found to be a state of decline and recommended to be removed, 14 of the trees were of low quality, 45 of the trees are moderate quality and only 5 were found to be of the highest quality.	
18	4.3 Current Use/Uses (Functions of the Green)	18	<p>(1) Creating an oasis within our ever-increasing urban population</p> <p>According to the latest census, almost two thirds of our increasing population are now living in an urban area. “Over half, 55%, of the world’s population are now living in urban areas. By 2050 this is projected to be 68%”. This is moving us further away from the natural environment and increasing the pressure on government agencies to provide trees and green space for urban populations in areas where the space is at a premium. People in built up areas are now relying more and more on public amenities, accessible green spaces, parks, and parkland.</p> <p>Parks such as the Green really are the lungs of the city. They are where people can escape to, run, unwind, and relax a place to get back to nature and reconnect. One of the great features of these historic parks is the open/accessible designed treed landscapes that they incorporate. Large mature trees are an integral part of this landscape experience. St. Stephen’s Green Park is a green island floating in a sea of concrete. The essence of the Green is its continuous tree lined perimeter as is evident from the image below.</p>	<p>This point is acknowledged, however it is important to note that:</p> <ul style="list-style-type: none">• During construction only 5% of the total Park is taken up by MetroLink, while in the operational phase / permanent state, this is just 0.2% and therefore TII maintain this will not have significant impact on the Park.• 64 trees will be lost during the construction phase, confined to the east side (adjacent to the Park fence line) with all trees felled to be replaced. <p>The combination of a MetroLink station at this location and the high quality amenity that is St. Stephen's Green Park will enhance access to this very important amenity for the public at large, allowing people an opportunity to improve wellbeing, while also reducing car dependency, Green House Gas (GHG) emissions, noise levels and improving air quality, while allowing citizens to enjoy St Stephen's Green long into the future.</p>	
19	4.3 Current Use/Uses (Functions of the Green)	18	<p>(2) Improvements to the air quality we breathe</p> <p>This innate desire to be close to or have contact with nature is known as the Biophilia hypothesis. Considerable worldwide research has been carried out on the many benefits of trees but probably the most current/topical of these benefits is environmental. According to the World Health Organisation (WHO), “air pollution now kills around 7 million people, globally, every year”. Mature trees such as those within the Green capture air pollutants and fine dust particles and helps to clean our atmosphere.</p>	<p>The removal and replacement of 64 trees is a fraction of the total number of trees contained within the Park and will therefore not have a significant impact in terms of air pollution. Furthermore, all trees and vegetation removed will be re-established post construction. While it is acknowledged that the reestablishment of trees will take time, the MetroLink project itself is a key infrastructural project for Ireland in terms of modal shift away from cars and thereby improving the air quality in the receiving environment.</p>	
20	4.3 Current Use/Uses (Functions of the Green)	18	<p>(3) Combatting the effects of Climate Change</p> <p>A recent study in the UK has shown that “increasing tree cover in Urban areas by 10% can reduce urban surface temperatures by as much as 4 degrees Celsius”. That may be considered the difference between a comfortable and an uncomfortable day, whereas in some countries it can be the difference between life and death. The Tree Council of Ireland’s theme for National Tree Week in 2019 was “Planting for our planet”, a nod to how trees can benefit us all worldwide. The removal of over 64 trees on the perimeter of the Green will take decades to recreate the canopy we have today.</p>	<p>The temporary removal of 64 trees is a fraction of the total number of trees contained within the Park and will therefore not have a significant impact in terms of urban surface temperature overall. Furthermore, all trees and vegetation removed will be re-established post construction. While it is acknowledged that the reestablishment of trees will take time, the MetroLink project is a key infrastructural project for Ireland in terms of achieving greenhouse gas emission reduction targets, with an ultimate long term aim to reduce the effects of climate change including excessive heat.</p>	
21	4.3 Current Use/Uses (Functions of the Green)	19	<p>(4) The physical and psychological health benefits of trees</p> <p>Research has shown that “the closer you live and work to trees and the natural environment the better off you are, physically and psychologically”.</p> <ul style="list-style-type: none">▪ Asthma.▪ Mental health/psychological well-being.▪ Stress and lower glucose levels in diabetics.	<p>The removal and replacement of 64 trees is a fraction of the total number of trees contained within the Park and these trees will be replaced leading to the reestablishment of the area. However, during the short to medium term the majority of St Stephen's Green will remain in situ (only 5% of the Green taken during construction) providing the significant physical and psychological benefits referred to. In addition, it should be noted that as outlined in Chapter 10 Human Health and Chapter 11 Population and Land use, there will be a significant benefit to the population from a human health and well perspective from the provision of MetroLink at this location.</p>	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
22	4.3 Current Use/Uses (Functions of the Green)	19	(5) Biodiversity This revised proposed construction zone will result in the removal of over 64 trees along with the associated understory planting. Some of these trees exceed heights of 15-20m with the tallest measuring 26m in 2018. The main species include Horse Chestnut, Sycamore, Birch and Holm Oak, a species associated with Lord Ardilaun. One of the last surviving Elm trees is the city centre is located with the proposed construction zone. This scheme will significantly impact the environmental and biological benefits, these habitats provide to the environment and wildlife.	Please refer to response (3) above. In relation to the Elm trees, TII regret the loss and recognise its importance. The AIA Report notes that there are 3 elm trees that will be felled. TII will explore a means by which these trees can be excavated/stored and replanted.	
23	4.4 Planning Context	19as outlined in the Planner’s Report of the Draft Railway Order 2022, “No planning applications are affected by the tunnel alignment between St. Stephen’s Green Station and Charlemont.” It is noted that DOWNEY have also carried out an examination of the planning history pertaining to the property subject to this submission, which determined there are several planning applications made within proximity to the Green. An overview of the most relevant applications are as follows: Reg. Ref. 4951/22 - By Order dated 23rd November 2022, Dublin City Council granted planning permission for a development on lands at the National Concert Hall, Earlsfort Terrace, Dublin 2,..... Reg. Ref. 4559/22 - Registered on the 27th of July 2022 by Dublin City Council, the proposed development on lands at No. 23 St. Stephen's Green (Protected Structure) and rear of No. 22 St. Stephen's Green, (Protected Structure), Dublin 2,..... Reg. Ref. 5099/22 - Registered on the 21st of October 2022 by Dublin City Council, the proposed development on lands at 92 and 93, St. Stephen's Green, Dublin 2,..... It is important to consider the above developments in the context of the construction phase of the Project.	The planning applications listed in the submission relate to works in proximity to the proposed works. The projects listed would be considered within the cumulative assessment. They had not been previously assessed due to them being submitted after the assessment cut off date in May 2022 but will be considered in a gap assessment that will be carried out prior to an Oral Hearing if they have been granted permission at that time. Please also refer to 'Cover Letter' and response (10) that outlines the process for seeking permission to develop in the vicinity of MetroLink infrastructure. In addition, we will assess future developments when they are at sufficient level of design maturity to allow an assessment as to its potential impact to be made and mitigated. TII will work with developer to enable such development to take place over and adjacent to MetroLink as is evidenced current discussions with developers etc.	
24	4.4 Planning Context	20	In relation to the Draft Railway Order’s consistency with planning policy and planning guidelines, a non-exhaustive list of planning policy and legislation at National, Regional, and Local levels, is included in Appendix 1 of this submission, the Board are invited to refer to this for further details. We would respectfully request that An Bord Pleanála ensure that TII have fully assessed the Project regarding existing planning policy, as well as adherence to the relevant local policies and guidelines pertaining to each individual property.	TII have undertaken a full assessment of the planning policy and planning guidelines in the Planning Report that was submitted as part of the Railway Order Application based on policy and planning guidelines in force at that time. All changes to planning policy will be considered in a gap assessment that will be carried out prior to an Oral Hearing	
25	4.4 Planning Context	20	DOWNEY note that this proposed Draft Railway Order is a strategic long-term development and An Bord Pleanála may consider Draft Development Plans in assessing the Project. It is also crucial to note that on foot of a granted Order and during the detailed design stage, a revision to planning policy is expected, whereby adopted plans and legislation may have to be adhered within this stage. This may require an amendment to the Draft Railway Order and further assessments, including public consultation.	Given planning policy and strategy are being updated periodically, TII will undertake a further review of planning policy in advance of the oral hearing to allow for an updated presentation to An Bord Pleanala on the Project's consistency with active policy requirements. The adherence to planning policy will be tracked all the way through the Project's design. There are no draft Development Plans or Local Area Plans of relevance to the proposed railway works at this location. The Board is only entitled to take into account Development Plans and Local Area Plans that have been adopted as of the date of the decision to grant the Railway Order, albeit it can request information in relation to such draft Plans before they are adopted in order if it anticipates they may be adopted before it makes its decision.	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
26	5.0 Material Considerations	21	The alignment drawing ML1-JAI-EIA-ROUT_XX-DR-Y-04025 and the Contour drawing ML1-JAI-EIA-ROUT_XX-DR-Y-21148 show different alignments. This error has resulted in deficient information within the SID application submitted under Section 2 of the Planning and Development Act 2000 (as amended), to assess the vulnerability of damage due to vibration cause by both tunnelling and operation of underground train on this section of the alignment. This affects several buildings under the management of the OPW particularly within the Kildare Street, Merrion Square and St. Stephen’s Green areas.	The alignment shown on drawing ML1-JAI- EIA-ROUT_XX-DR-Y-04025 is correct and the contours on drawing ML1-JAI-E1A-ROUT_XX-DR-Y-21148 reflect the same alignment. The tunnel centreline on drawing ML1-JAI-E1A-ROUT_XX-DR-Y-21148 deviates slightly from the contours and is a drawing error. The error is clear on the face of the drawing. There is no deficiency with the assessment. The correct alignment has been used for all environmental impact assessments including tunnel induced settlement, and construction and operational noise and vibration impact assessments. It is not clear what point the OPW makes when it refers to "an SID application submitted under section 2 of the Planning and Development Act 2000". The current application is not an SID application and section 2 of the Planning and Development Act 2000 is the definitions section. The current application is an application for a Railway Order submitted under Section 37 of the Transport (Railway Infrastructure) Act 2001.	
27	6.0 Legal Considerations	21	Duplicate of matters raised in the OPW Cover Letter - Re: Railway (Metrolink–Estuary to Charlemont via Dublin Airport) Order 2022 – Submissions by the Commissioners of Public Works in Ireland, page 2 Legal Requirements and page 6 Legal Agreements	We have covered this in our response to that document.	
28	6.1 Legal Status of Saint Stephen's Green	22	<p>Saint Stephen’s Green (“the Green”) has a special statutory status as a public park. This is provided for under the Saint Stephen’s Green (Dublin) Act 1877 (“the Act of 1877”), which is expressly maintained in force under section 2 and Schedule 1 of the Statute Law Revision Act 2012. It should be noted that this is the specific and original statutory status of the Green, separate from any consideration of the Green as a national monument within the meaning of the National Monuments Acts 1930 to 2014 and any issues arising in that regard.</p> <p>Arising from a series of transfers of statutory functions since the 1990s, ownership of the Green under the Act of 1877 is vested in the Minister for Housing, Local Government and Heritage, as are all functions under the Act of 1877 which do not relate to day-to-day operation of the Green. The ownership of the Minister extends not only to the area enclosed within the railings surrounding the Green, but also to the area outside the railings but within the surrounding posts (see section 6 of the Act of 1877). The day-to-day operation of the Green is, by reason of the transfers of statutory functions just mentioned (see in particular S.I. No. 690 of 2003), vested in the Minister for Finance and discharged on that Minister’s behalf by the Office of Public Works.</p>	This is consistent with our understanding of the park's legal status and does not need to be addressed.	
29	6.1 Legal Status of Saint Stephen's Green	22	<p>Accordingly, the Green is one of only a handful of public parks in the State afforded the status of being specifically established under its own particular statute, the others being the Phoenix Park (under the Phoenix Park Act 1925) and the Bourn Vincent Memorial Park at Killarney (under the Bourn Vincent Memorial Park Act 1932).</p> <p>Section 15 of the Act of 1877 provides that the Green shall be maintained as “an ornamental park or pleasure ground for the recreation or enjoyment of the public” and that the Green shall be allowed to be “used and enjoyed as a public park for the recreation and enjoyment of the public, and not for any other purpose”.</p> <p>Section 116 of the Dublin Transport Authority Act 2008 dis-applies section 15 of the Act of 1877 in respect of railway works carried out pursuant to a railway order under applicable legislation and in respect of the operation of a railway or metro in or under the Green. However, this provision appears to govern the situation after a railway order has been granted and does not require that such an order be granted.</p> <p>While the Green evolved historically over a long period, its current form largely arises from statutorily required works carried out under the provisions of section 4 of the Act of 1877.</p> <p>By reason of its great heritage importance, the Green also falls into the definition of “national monument” for the purposes of section 2 of the National Monuments Act 1930 and, as it is currently owned by the relevant Minister under the National Monuments Act 1930 (as amended), i.e. the Minister for Housing, Heritage and Local Government, is subject to a legal requirement under section 14 of the Act of 1930 for consent for any works to it or ground disturbance around or in proximity to it. The Green is also a Protected Structure under the Planning and Development Act, 2000 (as amended).</p>	This is consistent with our understanding of the park's legal status and does not need to be addressed.	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
30	7.0 Engineering Considerations	23	<p>The option studies have been reviewed by the OPW and its engineering consultants, who have concluded that some of the key assumptions adopted to reach their conclusion are flawed.</p> <p>The OPW wishes to work jointly with TII to develop a solution that satisfies the requirement for a station in the vicinity of the Green, a National Monument, but has no impact on the Park.</p>	<p>Please refer to response (1) above.</p> <p>TII are committed to working with OPW to minimise any potential impacts on St Stephen's Green Park but would reiterate that TII consider the station location selected is the optimum solution based on the work and options studies carried out by TII.</p>	
31	7.1 Route Alignment	24	<p>Many of the reports refer to chainages along the alignment. However, there are no plans that indicate these chainages, and this makes reviewing the Draft Railway Order and EIAR difficult.</p>	<p>The Plans of Proposed Railway Works - Alignment Drawings show the chainages. These have been and continue to be available online since TII lodged the application for a Railway Order.</p>	
32	7.3 Park Infrastructure	24	<p>The perimeter wall, railings and paving are fundamental elements of the park that will be affected by the construction of the running tunnel and station box. The lakes within the park are both fed and drained through a network of pipes and these need to be considered in future assessments.</p>	<p>Please refer to response (14) above regards the perimeter wall, railings and paving.</p> <p>EIAR Chapter 18 Hydrology, section 18.4.3.4.5 identifies the hydrological connections to the ponds at St. Stephen's Green and confirms these will not be impacted by the proposed MetroLink station construction.</p>	
33	8.0 Impacts on St. Stephen's Green Park	24	<p>Having carried out a detailed examination of the Park, with its numerous protected structures, the OPW is not satisfied with the level of impact the proposed Project, in its current form, will have on this National Monument.</p>	<p>TII acknowledge and understand the OPW position. TII are committed to working with OPW to minimise any potential impacts on the Green during the construction phase and to ensure that all elements of St Stephen's Green are correctly reinstated following the completion of construction.</p>	
34	8.1 Tree loss &Impact on Biodiversity	24	<p>The proposed station will have a significant impact on biodiversity of the Park, which serves as a natural reserve for the wider area. Of 800 trees within the Green, 225 may be impacted by this Project (28.2%). The proposal to fell 64 trees, and to impact on the roots and structures of more than a quarter of all trees within this National Monument is an unprecedented proposal which will damage a flagship green, tranquil spaces within Dublin City Centre.</p>	<p>TII does not agree that the Project will have a significant impact on the biodiversity of the Park, or that 225 trees will be impacted by the proposed construction works. The Arboricultural Impact Assessment (AIA) undertaken (EIAR Appendix 27.3) identified that just 64 of the trees in St Stephen's Green Park could not be saved. This is 5% of all the trees in the Park. The 225 trees refers only to the number of trees surveyed, not the trees impacted. It should also be noted that the majority of the trees are lower value trees (category B, C and U trees) with just 5 Category A trees as stated in responses above.</p>	
35	8.1 Tree loss &Impact on Biodiversity	25	<p>In addition, 75% of the trees, shrubs and ground cover that line the eastern boundary are to be removed. Five of the 225 trees that were surveyed are classed as Category A trees in that “They are large, high-quality trees which should be retained. They are capable of making a significant contribution to the area for 40 or more years” and they are particularly good examples of their species, especially if rare or unusual, or those that are essential components of groups or formal or semi-formal Arboricultural features (e.g., the dominant and/or principal trees within an avenue) Trees, groups or woodlands of significant conservation, historical, commemorative or other value.</p> <p>These mature trees support the lives of many organisms. Birds, small mammals, and other wildlife such as bats and invertebrates use the trees for food, shelter, and nesting. During times of extreme weather, animals can seek shade and shelter under the trees without being away from their food sources. This revised proposed construction zone will result in the removal of over 64 trees along with the associated understory planting.</p>	<p>TII acknowledge that the loss of any trees at St. Stephen's Green. Please also refer to response (3) above.</p> <p>The Park has also been identified as being important for Bat species and Breeding Birds (as identified in Chapter 15 of the EIAR). However the potential impacts are predicted to be not significant due to the very small habitat loss and the implementation of mitigation measures (such as the installation of nest boxes).</p>	
36	8.1 Tree loss &Impact on Biodiversity	25	<p>Some of these trees exceed heights of 15/20m with the tallest measuring 26m in 2018. The main species include Horse Chestnut, Sycamore, Birch and Holm Oak, a species associated with Lord Ardilaun. One of the last surviving Elm trees is the city centre is located with the proposed construction zone. This scheme will significantly impact the environmental and biological benefits, these habitats provide to the environment and wildlife.</p> <p>These trees are critical to the historic boundary of this National Monument. They are also critical to protecting the people of Dublin using the Green from harmful pollutants in the air. The park is surrounded by 3-4 lanes vehicular traffic, Luas, and buses. These trees significantly reduce noise emanating from the city, the trees control temperature extremes, reduce the risk of flooding and remove carbon dioxide from the atmosphere.</p>	<p>Please refer to the above responses in relation to quality of trees being felled.</p>	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
37	8.1 Tree loss &Impact on Biodiversity	25	<p>The unprecedented impact that the construction of the station would have on biodiversity in Dublin’s city centre contravenes the policy within the Dublin City Development Plan 2022-2028.</p> <p>The impacts on the biodiversity of the Green can be considered as follows:</p> <ul style="list-style-type: none">▪ Landscape, historical, and visual character of the Green will be lost. Extensive parkland will be removed from the public to facilitate storage and construction works outside the footprint of the station and tunnel.▪ The continuous tree lined perimeter and Victorian landscape character of the Green will be lost. Lime walk may be impacted.▪ Removal of 64 mature trees, plus semi mature trees, shrubberies, and spring floral displays.▪ Removal of external perimeter path and removal of access to a large portion of the internal perimeter path used by thousands daily.▪ Noise pollution and visual intrusion and loss of habitats for wildlife. Habitats for Flora and Fauna will be impacted with the loss of tree canopy.▪ Impact on tourism during the construction period.▪ We cannot ascertain if large trees will re-establish at this location. As a result of the underground structure, the depth of soil may not be sufficient to ensure adequate rooting zones for large trees.▪ The social and environmental benefits as outlined above will be compromised.▪ The proposed reinstatement treatment is not in keeping of the historic fabric of the Green, Dublin’s oldest public park. The placement of infrastructure within the green will require planting exclusion zones and maintenance access areas, further reducing the space available for public enjoyment and habitat provision.	<p>MetroLink is a transformative piece of new public transport infrastructure, the first of its kind in Ireland and impacts are unavoidable.</p> <p>This section makes an unparticularised assertion that there is a breach of Development Plan policy. TII have fully assessed and reported on the impacts throughout the EIAR and consider that the proposed mitigation measures presented in the EIAR as outlined in the response to this submission will ensure that the proposed development does not contravene the Dublin City Development Plan policy. Having regard to the points being raised by OPW as the basis for the statement that MetroLink contravenes the CDP, TII would note the following:</p> <p>Most of the impacts identified here are not biodiversity impacts, which have been fully assessed in Chapter 15 of the EIAR. Of the remainder, many are short term impacts.</p> <p>The landscape, historical and visual character of the Green will not be lost as all heritage elements of the park including railings, bollards, paving slabs etc will be reinstated following the construction phase (as described by response (4) above) and trees lost will be replaced by similar. (as described by response (3) above). The replanting proposals will follow a planting plan to allow the continuous tree lined perimeter and Victorian landscape character to be reinstated and the lime walk will not be impacted. Specifically for this location and the re-establishment of trees, it should be noted that the station roof slab has been designed to ensure that a minimum of a 2m depth of soils will be available to allow for the re-establishment of mature trees. Some temporary habitat loss due to the removal of trees and disruption to this area of the Green (just 5% of the Park area) will occur as described in the EIAR. However these impacts are temporary and cover a limited area of the park allowing the majority of the Park to function as normal. The planting exclusion zones and maintenance access areas are imposed to protect the trees not being felled and therefore is keeping with the historic fabric of the park as far as practicable.</p>	
38	8.1 Tree loss &Impact on Biodiversity	26	<p>The Dublin City Development Plan outlines a number of policies with respect to the Green and the importance of biodiversity and green infrastructure. We would respectfully request that TII re-evaluate the proposal to ensure compliance with the following:</p> <p>G13 Multi-functionality To ensure delivery of multifunctional green and civic spaces that meet community needs, support biodiversity, promote active and passive recreation, flood and surface water management and local habitat improvements. The multifunctionality of spaces will be balanced against the need to protect and enhance local habitat and the recreational and functional requirements of parks.</p>	<p>The Dublin City Development Plan 2017-2022 and the then Draft Dublin City Development Plan 2022-2028 have been taken account of in the preparation of the EIAR. TII does not see any conflict with this current policy and as outlined previously, TII considers they have balanced the need to protect and enhance St Stephen's Green as evidenced by the station alternatives considered and assessed. TII would also note that the proposed St. Stephen's Green Station adds functionality to St Stephen's Green in accordance with the policy and will enhance this area by providing Dubliners and visitors alike with high quality public transport access to St. Stephen's Green and to this area of the city, thereby reducing car dependency, noise levels and improving air quality, while allowing citizens to enjoy St Stephen's Green long into the future.</p>	
39	8.1 Tree loss &Impact on Biodiversity	26	<p>G107 National Biodiversity Action Plan 2017-2021 To support the management targets for nature conservation sites set out in the National Biodiversity Action Plan 2017 (and as updated) and the objectives for local authorities to address threats to biodiversity.</p>	<p>The National Biodiversity Action Plan 2017-2021 has been taken into account in the preparation of EIAR Chapter 15 Biodiversity.</p>	
40	8.1 Tree loss &Impact on Biodiversity	26	<p>G108 Dublin City Biodiversity Action Plan 2021-2025 To support the implementation of the 'Draft Dublin City Biodiversity Action Plan 2021–2025' (or as updated), which sets out key themes and objectives for biodiversity conservation and restoration and measurable targets and actions, in partnership with all relevant stakeholders.</p>	<p>The draft Dublin City Biodiversity Action Plan 2021-2025 has been taken into account in the preparation of EIAR Chapter 15 Biodiversity.</p>	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
41	8.1 Tree loss &Impact on Biodiversity	27	<p>GI24 Multi-Functionality To incorporate new open space into the green infrastructure network for the city and providing a multi-functional role including outdoor recreation, biodiversity, urban drainage, flood management, connection, and carbon absorption without compromising public access to and the amenity function of open space (see Section 15.6: Green Infrastructure and Landscaping).</p> <p>15.6.1 Green Infrastructure To support the green infrastructure network, any proposed development for sites which adjoin either core areas or any buffering parks and open spaces shall include an assessment of impacts on biodiversity and make provision for enhancement of ecological features. The following measures to strengthen the city green infrastructure (GI) network plan will be required.</p> <ul style="list-style-type: none">▪ Increase habitat protection to support the wider GI network.▪ Provide additional green space to meet deficiencies in connectivity of the GI network.▪ Ensure retention of mature habitats and provide for long-term ecological succession.▪ Increase connections and improve accessibility for pedestrians and cyclists to the wider GI network.▪ The use of drainage systems (SuDS) and soft/nature-based engineering solutions for surface water management to control the rate of run-off, protect water quality and mitigate the environmental impacts of flooding and erosion.▪ Provide for public access to ensure that the benefits of access to the GI network is available to all citizens.▪ Ensure that proposed developments do not create negative impacts on the existing GI network.	<p>This policy of both the Dublin City Development Plan 2017-2022 and the Dublin City Development Plan 2022-2028 relate to the provision of new open space.</p> <p>The proposed Project includes elements that are located in lands that are zoned for open space use. In each of these locations, the detail of the design ensures that the open spaces will be reinstated to open space use following completion of the construction phase. Mitigation measures will be implemented during construction and operation to minimise the effects of habitat loss and habitat degradation on biodiversity.</p>	
42	8.1 Tree loss &Impact on Biodiversity	27	<p>15.6.10 Tree Removal Where a proposal impacts on trees within the public realm, a revised design will need to be considered to avoid conflicts with street trees. Where a conflict is unavoidable and where a tree, located on street, requires removal to facilitate a new development or widened vehicular entrance and cannot be conveniently relocated within the public domain, then when agreed by Parks Services and the Planning Department by way of condition to a grant of permission, a financial contribution will be required in lieu. The financial contribution is calculated by the Capital Asset Value for Amenity Trees (CAVAT) by an Arboriculturist. The payment is required to be lodged with Dublin City Council before the tree can be removed.</p> <p>The removal of 28% of the trees within the park is also a clear violation of the St. Stephen’s Green Park Conservation Management Plan 2015-2020. It lists the following objectives specifically for nature and biodiversity:</p> <p>“- To continue to adopt management measures sensitive to biodiversity, to identify areas where such measures would have precedence and to develop action plans to maximise biodiversity, - To raise awareness of biodiversity, - To protect and enhance the condition of rare and important species of flora and fauna, - To continue research and development and monitoring on all aspects of biodiversity, in order to support the decision-making process in management practices for the overall enhancement of biodiversity,”</p>	<p>TII do not agree that a financial contribution should imposed for tree loss. The trees that have been identified as requiring removal are being replanted as close to the original location as possible will carried out in accordance with the proposed landscaping plans.</p> <p>TII do not recognise the figure of 28%, as noted above it is 5% during construction and 0.2% for operational phase. Please see response (34) above. TII also do not consider that they are in violation of the St. Stephen's Green Conservation Management Plan 2015-2020. The EIAR demonstrates that the Project has adopted across the scheme management measures sensitive to biodiversity whilst taking account of the other benefits that are provided by MetroLink.</p>	
43	8.1 Tree loss &Impact on Biodiversity	28	<p>The loss of biodiversity due to the impact of the Project on the Green, will have a detrimental impact on the biodiversity of the park and the city as a whole. Good planning promotes the growth and intensification of biodiversity within green spaces in the city centre. The development is in clear violation of this and would be an unprecedented regression and destruction of one of Dublin’s vital green infrastructure spaces.</p>	<p>Please refer to response (35) above. TII do not agree the Project is in violation of good planning, nor that this is an unprecedented regression and destruction of St. Stephen's Green. Responses (1) to (5) set out the balanced considerations that have determined the proposed location of St Stephen's Green Station.</p>	
44	8.2 Impacts on the Built Heritage	28	<p>The proposed plan would replace the historic elements of this Park with a contemporary plaza, which is incongruent with the wider character of the area. The Green is a square park, and all four corners of that square should read as a whole and not be diluted by a contemporary plaza to one corner. The existing granite slabs located around the exterior pavement of the Green is laid to an historic bond, the proposed feature pavement is completely out of the historic character. The proposed 36 stainless steel security bollards and contemporary standard lighting are not in keeping with the historic park and are further evidence of an inaccurate assessment of the historic importance of this Park.</p>	<p>TII do not agree. The primary visual impact public realm / landscape design for each MetroLink station has been designed to integrate with the existing predominant forms, colouring, materials etc within the local context. The proposal for a station entrance at the north east corner of St Stephen's Green is consistent with the current layout where there is already a plaza. TII will commit to restoring the existing granite slabs and will consult with OPW in relation to method statements.</p> <p>The Hostile Vehicle Management (HVM) bollards are a safety/security requirement. TII will work with OPW to reduce the intrusiveness of the HVM bollards and light stands when finalising these design details.</p>	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
45	8.2 Impacts on the Built Heritage	29	<p>The station will directly impact two Dublin City Record of Protected Structures and three NIAH sites the list is as follows.</p> <p>List of RPS impacted by the station:</p> <ul style="list-style-type: none">▪ Railings, gates, and plinth walls of perimeter boundary on St. Stephen’s Green (REF NO. 7751).▪ Surrounding bollards and traditional-style lampposts (REF NO. 7752). <p>List of NIAH sites impacted by the station:</p> <ul style="list-style-type: none">▪ Wolfe Tone Memorial (NIAH REG NO. 50100265) (Regional rating).▪ Famine Memorial (NIAH REG NO. 50100264) (Regional rating).▪ St. Stephen’s Green Park (NIAH REG NO. 50100259) (National Rating). <p>This is in violation of the policies stated in the Dublin City Development Plan 2022-2028 with regard to Built Heritage, which read as follows:</p> <p>BHA2 Development of Protected Structures.....</p> <p>BHA3 Loss of Protected Structures.....</p> <p>BHA4 Ministerial Recommendations.....</p> <p>BHAS Demolition of Regional Rated Building on NIAH.....</p>	<p>As outlined in EIAR Chapter 26 Architectural Heritage, a number of structures of architectural heritage significance will need to be removed into safe storage from the surface in advance of the construction phase. At the completion of the construction phase, these elements will be reinstated in their original locations (where possible) in accordance with a method statement prepared by the Project Conservation Architect (PCA). The OPW and the Minister’s office (Housing) will be consulted on the method statement prior to commencement of works. All works of removal, transportation, storage and reinstatement are to be supervised by the PCA.</p> <p>TII would also point out that there is no building demolition associated with this station.</p> <p>This complies with each of the policies of the Dublin City Development Plan 2022-2028</p>	
46	8.2 Impacts on the Built Heritage	30	<p>The removal of built heritage will result in the degradation of the importance of the surrounding of the Green. The dilution of historic monuments and spaces of historical and national significance is to be avoided or justified according to the Dublin City Development Plan 2022-2028. MetroLink is in contravention of the built heritage and archaeology chapter of the Development Plan.</p>	<p>TII do not agree. All of these features will be temporarily removed by a specialist heritage contractor in accordance with a method statement to be prepared by the Project Conservation Architect (PCA), brought into secure storage for the duration of the works and conserved as necessary. At the completion of the construction phase, these elements will be reinstated in their original locations (where possible) in accordance with a method statement prepared by the PCA. All works of removal, transportation, storage and reinstatement are to be supervised by the PCA and will be consulted with the OPW and the Minister’s office (Housing) prior to the works.</p> <p>It is also of note that the MetroLink works are taking place over a very limited area of the Park, just 5%, reinstated on completion so they impact just 0.2% of the Park. It is therefore considered that the importance of the Green overall will not be degraded. Furthermore, in accordance with responses (1) to (5) above, TII have explained the rationale justifying the location of the proposed St Stephen's Green Station.</p>	
47	8.2 Impacts on the Built Heritage	30	<p>It also goes against the specific objectives for Archaeology, Architecture and Built heritage outlined in the St. Stephen’s Green Park Conservation Management Plan 2015-2020. These are as follows:.....</p>	<p>This is not correct. The proposed Project does not contravene the objectives of the management plan in this regard. The provisions cited set out general principles and OPW does not explain how they are inconsistent with the proposed Project.</p>	
48	8.3 Landscape & Visual Impact	31	<p>The proposed station will completely disrupt the Park’s Victorian square design by implementing a plaza at the north-eastern corner. The plaza will upset the existing symmetry and completely alter the character of the Green. St. Stephen’s Green is a square park, and all four corners of that square should read as a whole and not be diluted by a contemporary plaza to one corner. The square design is an essential aspect of the park’s character and of Victorian and Georgian parks across Dublin. The Green participated in “Square Day” which is held in association with the Dublin Civic Trust, to celebrate the city’s unique square parks.</p>	<p>Please refer to response (44) above.</p>	
49	8.3 Landscape & Visual Impact	31	<p>The development of a plaza along the north-eastern corner is contrary to the vision outlined for the protection of the Green in the Dublin City Park Strategy 2019-2022 which states that “The long-term vision for St. Stephen’s Green combines its protection, conservation and, where appropriate, restoration as an important and unique historic landscape with the facilitation of appropriate access and use.”</p>	<p>The policies cited are general statements of principle and OPW has not explained how the proposed Project is inconsistent with them.</p> <p>As stated previously, at the completion of the construction phase, Park railings, bollards, lamp standards, paving outside the park railings, the Wolfe Tone monument, and the Famine sculpture will be reinstated in their original locations (where possible) in accordance with a method statement prepared by the Project Conservation Architect (PCA). OPW and the Minister’s office (Housing) will be consulted on the method statement prior to commencement of works. All works of removal, transportation, storage and reinstatement are to be supervised by the PCA a).Furthermore, the Park layout will be reinstated following the construction phase, with only minor amendments to the fence line of the Park at the proposed station entrance. Once completed, elements of the Station that will be visible at the surface, will represent just 0.2% of the Park area. TII do not agree that this intervention will impact the ability of the Park to comply with the Dublin City Park Strategy 2019 - 2022.</p>	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
50	8.3 Landscape & Visual Impact	31	<p>This development will completely alter the landscape and historical layout of the park and contravenes the specific objectives of the St. Stephen’s Green Park Conservation Management Plan 2015-2020. These are as follows:</p> <p>“- To encourage the planning authorities to have regard to the landscape setting of the Green, including its perimeter footpath. - To ensure that trees and plantations continue to thrive in the Green..... - To conserve the existing topography of the Green - To conserve and enhance buildings, structures, and works of art - To ensure that, where any new features, services and amenities in the Green are required, it is essential that they are appropriate and sensitive to the historic character of the Green. - To continue to develop educational materials on the historical and designed landscape of the Green.”</p>	<p>TII do not consider that the proposed location and design of St Stephen's Green Station contravenes the St. Stephen’s Green Park Conservation Management Plan 2015-2020 or the items listed. TII would also note that:</p> <p>(1) the existing topography of the Park will not be impacted by the proposed Development (2) All structures and monuments will be reinstated following the construction phase and no buildings or works of art will be impacted (3) The proposed new features within the Park area have been minimised to ensure that their effect on the Park is minimal, and as such will occupy just 0.2% of the park area.</p> <p>Nor does TII consider that the Project will completely alter the landscape and historical layout of the Park as noted by response (44) above.</p> <p>As previously stated, TII are committed to continuing to consult and engage with the OPW to refine the design to minimise any impact on the Green.</p>	
51	8.4 Access & Public Use	32	<p>The construction of the station will impede upon how people use the historic public park. The proposed alignment of the entrance to the MetroLink would encourage commuters to transverse the Green, in order to connect with the southern shopping district or change for the Luas Green Line. This will change the use of the park to become a cut through for commuters and shoppers on their way to other parts of the city, disturbing visitors walking at a gentle pace in a tranquil environment. The Green was not designed to facilitate this kind of movement and no design or thought has gone into how commuters will connect from the Luas green line Luas stop with the proposed MetroLink station at each end of the square. The Green will become a transport hub and very little is being done to create routes for commuters to connect with other modes of transport without impacting the serenity of the Park.</p>	<p>As detailed in EIAR Chapter 9, Traffic and Transport, the Luas Green Line stop at St. Stephen's Green (and the adjacent shopping district) lies within the 10 minute walking catchment of the proposed station on St. Stephen's Green East. The shortest route from the proposed station to these trip attractors will be via St Stephen's Green North (ie along the footpath that lies between the railings and the road). An analysis of the pedestrian comfort levels on St. Stephen's Green North demonstrates that increased passenger flows on this footway will not reduce current comfort levels between the north-east and north-west corners of St. Stephen's Green. Therefore, use of this footway will not be discouraged by increased commuter flows. Walking through the Park will be a longer and more convoluted route and is likely to be used by members of the public who are in less of a hurry to get to their final destination. Therefore the Green is not likely to become a "transport hub".</p>	
52	8.4 Access & Public Use	32	<p>While the Green is not designated as a major mobility hub, the proximity to connections with the Luas Green line, Dublin Bus, and other modes of transport, as well as it being a city centre location, will make it a major interchange. The Draft Greater Dublin Area Transport Strategy 2022-2042 states the following about the integration and inclusion of public transport modes:</p> <p>“The features of a well-integrated transport system include the physical environment of stops and stations; the length and quality of the walk between services; crossing points; travel information; fares integration; cycle parking; shelter; frequency and capacity of connecting services.”</p> <p>It goes against Measure INT5 of the Draft Strategy:</p> <p>“Measure INT5 – Interchange: It is the intention of the NTA, in conjunction with local authorities and transport operators, to ensure that passengers wishing to change between services on the transport network are provided with as safe, convenient and seamless interchange experience.”</p>	<p>EIAR Chapter 7, Consideration of Alternatives, and associated Appendix 7.3 St Stephen's Green Report, details how the Emerging Preferred Route assessment identified St Stephen's Green East as the preferred location for a station at St Stephen's Green due to the direct interchange required at Tara Street DART station.</p> <p>St. Stephen's Green East plays an important role in the city's transport network, as it is designated as a secondary strategic pedestrian route, a primary cycle route in the Greater Dublin Area Cycle Network Plan (NTA, 2013), is within a 10 minute walking distance to the Luas Green Line, and is an important link in Dublin's bus network serving the south-east of the city. As a result, the location of the station on St. Stephen's Green East facilitates strong integration with all modes within the transport network, including public transport services, and is therefore not in contravention of INT5.</p>	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
53	8.4 Access & Public Use	33	<p>This anticipated increase in footfall between the north-east and north-west corners of the Green will generate greater commuter footfall traffic that has not been accounted for in the planning statement. It is critical for the design of the MetroLink station to accommodate this interchange and provide an appropriate interchange, and not for the historic park to become a walkthrough for multi-modal transport use.</p> <p>The change in access and public use change in use is a contravention of the objectives outlined in the St. Stephen's Green Park Conservation Management Plan 2015-2020. These are as follows: "- The overall objective is to provide a world-class visitor experience within the setting of a National Historic Park, - To facilitate an appropriate balance of recreational use and public appreciation..... - To facilitate and encourage a greater public understanding of the national and international significance of the Green..... - To ensure that all events demonstrate that they will minimise their carbon footprint within the Green, - To reduce the environmental impact of traffic & transport infrastructure on the perimeter of the Green, - To maintain the current high levels of access to the Green 365 days per year. - To respect and conserve the layout and distribution of the designed features and facilities, - To promote St. Stephen's Green including its landscape, natural amenities, and wildlife..... - To develop educational and tourist programmes..... - To continue to implement high standards of security and policing of the Green."</p>	<p>As set out by EIAR Chapter 9, Traffic and Transport, the Luas Green Line stop at St. Stephen's Green lies within the 10 minute walking catchment of the proposed MetroLink station on St. Stephen's Green East. When MetroLink is operational, an analysis of the pedestrian comfort levels on St. Stephen's Green North demonstrates that increased passenger flows on this footway will not reduce current comfort levels between the north-east and north-west corners of St. Stephen's Green. Therefore, use of this footway will not be discouraged by increased commuter flows.</p> <p>Regarding the connection to Luas Green Line, the more direct and shorter route to the MetroLink station is on the northern footway along the R138 as the entry and exit point to the Park are along this route and the Park route will be longer and more convoluted.</p> <p>The policies cited from the St Stephen's Green Park Conservation Management Plan 2015-2020 are broad statements of principle and OPW has not explained how the proposed Project is inconsistent with them.</p>	
54	9.1 Monitoring	33	<p>Once an agreement on the location of the Station has been agreed between the OPW and TII, we request that An Bord Pleanála attach a condition to the Draft Railway Order that ensures continuous monitoring of the Green to prevent any negative impacts on this National Monument. Access to all sections of the Green for monitoring, must be agreed in advance with the OPW. It is recommended that this monitoring takes place at least 3 months in advance of the construction of the Project and at least 6 weeks post the operational stage of the MetroLink.</p>	<p>It is not open to OPW and TII to agree a different Station location. OPW's submission, if adopted, would require a fundamental redesign to the Project in order to meet the GDA Transport Strategy's objective of linking Charlemont, Dublin City Centre, Dublin Airport and Swords. For the reasons outlined in the Planning Report, the EIAR and these responses, TII's position is that the Board should grant a Railway Order with no chance to the station location in St Stephens Green.</p> <p>Information on monitoring during the construction phase is outlined in Section 4.2.2 of Appendix A5.1 Outline CEMP of the EIAR. A number of documents will be provided by the Contractor and incorporated into the detailed CEMP and can be seen within Section 1.3 of the same document as above. TII will consult with the OPW and its clients in relation to final details of all monitoring affects properties and buildings under OPW's management. This monitoring information to be provided to the planning authority will be agreed separately with the planning authority.</p> <p>TII will consider any proposals from OPW in relation to appropriate monitoring of the National Monument.</p>	
55	9.2 Security Issues	34	<p>Given the nature of the State properties affected by the Project, we would respectfully refer An Bord Pleanála to Part XI of the Planning & Development Act 2000 (as amended), which states that:</p> <p>"Development by State authorities. 181.—(1) (a) The Minister may, by regulations, provide that, except for this section F902[and sections 181A to 181C], the provisions of this Act shall not apply to any specified class or classes of development by or on behalf of a State authority where the development is, in the opinion of the Minister, in connection with or for the purposes of public safety or order, the administration of justice or national security or defence and, for so long as the regulations are in force, the provisions of this Act shall not apply to the specified class or classes of development.</p> <p>b(iii) the making available for inspection by members of the public of any specified documents, particulars, plans or other information with respect to the proposed development;"</p>	<p>Section 181 is a provision intended to facilitate development for the purposes of security infrastructure (such as a naval base) by removing the requirement for planning permission. Section 181(1)(b)(iii) is one of a number of provisions dealing with alternative means of public consultation in relation to such security infrastructure.</p> <p>It has no application to developments that might affect security infrastructure as OPW appears to suggest.</p>	
56	9.2 Security Issues	34	<p>It is essential that security issues do not arise in the event of sensitive information being shared on the structure and operation of the OPW properties, including the operation of St. Stephen's Green Park. However, the OPW understands the importance of the detailed design stage of the Project and the wish to ensure that the detailed assessment of the Park takes place in the early stages of the design process, in conjunction with the OPW, to ensure that these sensitive State properties are not negatively impacted upon by the proposed Project. The OPW will liaise with TII and An Bord Pleanála on this matter.</p>	<p>These are valid concerns, but they relate to the safe transmission and storage of State security information and, as such, are outside the scope of the Railway Order application. It is envisaged that OPW will require TII to give certain contractual commitments in relation to its data security before any such information can be shared.</p>	
57	9.2 Security Issues	34	<p>All employees contracted to work on behalf of TII on this Project, and any associated works, must adhere to the properties protocol around access, security, and safety. This applies to all persons entering or working in proximity of the property. The day-to-day operations of the property cannot be interrupted by disruptions to any utilities. The design and operation of the MetroLink should be in line with best international practice, in relation to anti-terrorism and security measures.</p>	<p>TII will ensure that contractors working on its behalf on OPW property comply with property protocols around access, security and safety. Once the TII worksites are established, works within those sites will be secured to MetroLink standards.</p> <p>TII will minimise any disruption to utilities, and in the unlikely event a service interruption is necessary, OPW will be consulted and necessary measures put in place to minimise the impact to St Stephen's Green.</p>	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
58	9.2.1 Ground Movement	35	Stage 2: Stage 2 assessments of the walls, monuments and statuary in the Green shall be undertaken.	Appropriate ground movement assessments will be undertaken of all affected monuments, walls and statuary that are at risk of being impacted by construction generated ground movements and are not required to be temporarily relocated.	
59	9.2.1 Ground Movement	35	Stage 3: The EIAR states that Stage 3 assessment will be carried out where required for National Monuments by the Contractor appointed to construct this section of the MetroLink. The OPW expects to be consulted on the detail, scope of this assessment and programme for these assessments. It would be helpful if TII were to develop a Design Standard to ensure that all Stage 3 analyses of the OPW properties are carried out equally.	A design standard will be prepared that reflects the methodology described in EIAR Appendix 5.17. TII will consult with OPW to ensure they are appraised of the work being undertaken with regards to OPW property.	
60	9.2.1 Ground Movement	36	No mention of Stage 4 or 5 has been found in the Draft Railway Order or EIAR. Industry best practice as applied to London’s Elizabeth Line (Crossrail) required that two further Stages in the Assessment of ground movement were undertaken during the project.	The development of monitoring, mitigation and contingency plans and the subsequent close out of the impacts of settlement will form part of the scope of the Project for the detail design and construct phases. TII will develop the process to be adhered to by the contractor and this will be included in the contract documentation prepared for that contract. TII notes the description of stages 4 and 5 as included as Appendix D and confirm that the MetroLink Specification will reflect similar requirements to achieve the desired outcomes.	
61	9.2.1 Ground Movement	36	Stage 4 (Construction Stage): This stage is where any mitigation is implemented, and the monitoring of the stakeholders’ infrastructure is carried out. Also, the preconstruction defect surveys are carried out prior to any excavation. The OPW requires to review the detailed proposals for mitigation and monitoring. Monitoring proposals submitted to the OPW for review should include deep level monitoring and ground water level monitoring in addition to the building and surface monitoring typically implemented. The deep level monitoring will provide valuable data relating to the rock behaviour and has been usefully employed on HS2. The OPW will facilitate and observe the preconstruction defect surveys. It is noted that these shall be carried out by Professionally Qualified Engineers or Surveyors. The OPW requests that only Engineers or Surveyors with proven competence in regard to (historic) buildings of this fabric type, period and nature are selected. The contractor(s) will coordinate pre-construction defect surveys for identified properties, liaising (in conjunction with the employer) with the building surveyor employed to carry out the surveys and maintaining a dialogue with the relevant property owners throughout the duration of the works.	Information on monitoring during the construction phase is outlined in Section 4.2.2 of Appendix A5.1 Outline CEMP of the EIAR. A number of documents will be provided by the Contractor and incorporated into the detailed CEMP and can be seen within Section 1.3 of the same document as above. TII will consult with the OPW and its clients in relation to final details of all monitoring affects properties and buildings under OPW’s management. This monitoring information to be provided to the planning authority will be agreed separately with the planning authority. TII will employ Professionally Qualified Engineers / Surveyors with the appropriate expertise to undertake the pre and post condition surveys and OPW are welcome to observe the surveys being undertaken of their property.	
62	9.2.1 Ground Movement	36	Stage 5 (Close out): Once the excavation (tunnelling and station excavation) has been completed then the Contractor will want to decommission his monitoring. The OPW expects to be provided with close out reports for the monitoring of its property. As a minimum the close out report should include details of any mitigation carried out, a list of any repairs, time history graphs showing the movements monitored.	TII will share the closeout monitoring report that will demonstrate that construction ground movements have ceased, which will also require historical movement information to be presented. In the event of repairs, these will be scheduled.	
63	9.2.2 Utilities	36	It is likely that significant utility diversions will be required on St. Stephen’s Green East to facilitate St. Stephen’s Green station construction.	Utilities diversions will be required where construction of the Station extends into the highway, including path, but noting access along St Stephen’s Green East will be maintained. Utility diversions are fully assessed in Chapter 22 (Infrastructure and Utilities) of the EIAR.	
64	9.2.3 Noise and Vibration	36	(a) Tunnelling EIAR Table 6.2- GNV1 states that there is no effective mitigation available and therefore the impact will be managed by detailed consultation with the building owners. The OPW requests specific vibration limits that will be applied to the Green and that a monitoring regime to be implemented. EIAR Table 6.2- ANV16. sets out requirement for pre- and post-construction surveys of structures vulnerable to vibration induced damage. The OPW seeks to ensure pre- and post-construction surveys of structures vulnerable to vibration induced damage are carried out and this should include the Green.	It should be noted that the modelling presented in Chapter 14 of the EIAR has identified that vibration levels from the advancement of the TBM does not exceed the limits set out in Chapter 14 and therefore will not be at a level that will cause any structural damage to buildings. As a result TII are confident that the Park area will not be impacted by vibration resulting from the TBM advancement. Please also note that prior to the commencement of the construction phase, all sensitive monuments, railings, and other features will be removed from the works area and stored such they will not be at risk of damage from the proposed construction works. TII confirm that construction generated vibration will be monitored.	
65	9.2.3 Noise and Vibration	37	(b) Station Excavation The assumption is that the lowest charge would be implemented to avoid damage. The Green is located above and adjacent to the planned station box. At this distance, ground vibrations from the excavation may register up to 2.7mm/s.	As presented in EIAR Chapter 14, the thresholds for vibration values due to blasting activities are 8mm/s for standard buildings and 3mm/s for listed or potentially vulnerable buildings. In this case the vibration value is below both threshold limits. As a result, no significant impact is expected to the buildings or to the Park.	

Submission No.			239		
Organisation Name or Name of Submitter			Office of Public Works (OPW)		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park					
66	9.2.4 Work Sites	37	(a) Dust Appendix A16.4 of the EIAR requires a Dust Management Plan to be produced and implemented. The tunnelling will not generate dust in the vicinity of the Green. The station construction is in the Green and therefore dust from these constructions’ sites may affect this building.	<p>An Air Quality Management Plan, detailing dust mitigation methods will be prepared prior to construction works (EIAR Chapter 16 Air Quality, section 16.6.1.1) covering each works site, including that at St Stephen’s Green. The plan will include measures to minimise dust impacts arising from the proposed Project on the surrounding area including the following:</p> <ul style="list-style-type: none">- Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays will be used as required if particularly dusty activities are necessary during dry or windy periods;- Any blasting will be completed by specialised contractors with a specific blasting dust management plan;- Liaison with the OPW, Dublin City Council and other stakeholders; and- Hoarding will be provided around the entirety of the construction area. <p>When the dust minimisation measures detailed in the mitigation section (section 16.6) of EIAR Chapter 16 are implemented, fugitive emissions of dust from the site are not predicted to cause damage to property or impact human health.</p>	
67	9.2.4 Work Sites	37	(b) Ground Water Control There is an assumption that the tunnelling will not affect the ground water above the tunnel. However, there should be a ground water monitoring scheme implemented to confirm this and a contingency plan to manage any residual risk.	Groundwater levels will be monitored (baseline, during construction and for close out) and contingency plans will be in place linked to predetermined trigger levels.	
68	9.2.4 Work Sites	37	(f) Intervention Strategy The Green is located at the construction site of St. Stephen’s Green Station. The construction of this station will generate additional lorry movements, for both deliveries and spoil removal and other associated construction activities. There is significant risk that this will impact on the historic, fabric, structure, and elements of this important Protected Structure. It will be necessary that TII and their contractors demonstrate that this risk will be addressed and that all measures are taken to ensure there is no impact arising.	<p>Lorry movements will not impact the historic fabric, structure and elements of St Stephen's Green as there will be no risk of collision between HGVs and any sensitive structures. As stated previously, prior to the commencement of the construction phase, all sensitive monuments, railings, and other features will be removed from the works area and stored such they will not be at risk of damage from the proposed construction works. There is estimated to be between 20 and 60 vehicle movements per day on average, with a maximum of 136 vehicle movements predicted for a four day period. This level of vehicle activity is very low when compared to existing traffic movements on St Stephen's Green East and will not result in any potential impact to the historic fabric, structure and elements of St Stephen's Green, including vibration.</p>	
69	9.3 During Operation of the MetroLink	38	9.3.1 Noise and Vibration The OPW requests that floating track slab is installed between Chainage 17+980 and 18+400 (St. Stephen’s Green Station). This would mitigate the noise and vibration to acceptable levels under all the Government buildings, museums and the National Concert Hall and other significant Protected Structures along this route such as St. Stephen’s Green. The vibration during railway operations will not impact the building fabric or structure.	<p>As identified in EIAR Chapter 14, the operation of the proposed MetroLink will not result in any structural impact on buildings and/or parks. As a result there is no requirement for floating slab track generally, except for buildings that have "sensitive uses". In these cases floating slab track will be provided, including for certain OPW buildings as identified by Table 14.47. Floating slab track will be installed at Ch. 17+980, Ch. 18+100 and Ch. 18+760, Ch. 18+940 to reduce impacts on National Museums, National Gallery and the National Concert Hall.</p>	
70	9.3 During Operation of the MetroLink	38	9.3.2 Evacuation Strategy The Green, being a station location, will de facto also incorporate, evacuation routes, access for firefighting and associated ducts. The Green is located close to this station and so may be impacted by such interventions. As a significant building forming part of the important east terrace of protected structures addressing the Green and station, it is important that all interventions and impacts in this quarter are considered at the both the urban scale, individual building and down to individual elements of fabric and detail.	<p>Access and egress from the proposed station will be by way of the main entrance to the station and lifts provided outside the Park on St Stephen's Green East. Any requirement for emergency services or evacuating passengers to enter the Park will be discussed and agreed with OPW as part of the finalisation of the Station Fire and Safety Strategy and plan. The intent of the Plan will to be to minimise any Park intervention. Fire Service Access and Facilities are discussed in Section 6.6.5.6 of Chapter 6 of the EIAR.</p> <p>TII also confirm that all impacts and interventions in this quarter sympathetically take account of the urban realm. Please also refer to response (44) above.</p>	
71	9.4 Contractual Arrangement	38	The contractor(s) is required to undertake all activities in accordance with the relevant environmental requirements including the consent documentation and other regulatory and contractual requirements.	Agreed.	
72	9.4 Future Development	38	The OPW reserves the right to development the subject property in the future, this includes property above and below ground, subject to normal planning criteria. It is important that the development of the MetroLink does not interfere with extant planning permissions pertaining to the subject property and the right of the applicant to develop these, in advance, in tandem or post operation of the MetroLink Project.	<p>This item is not relevant to this location as oversite development will not be permissible over the proposed station within St Stephen's Green park.</p>	

Submission No.			239	
Organisation Name or Name of Submitter			Office of Public Works (OPW)	
Item No.	Section Ref.	Page No.	Observation Statement	TII Response
OPW Cover Letter - Re: Railway (Metrolink-Estuary to Charlemont via Dublin Airport) - St Stephens Green Park				
73	10.0 Conclusion	39	<p>With regards to the Gall Zeidler assessment, the OPW asserts that the risk of damage to St. Stephen’s Green Park, a National Monument, is unacceptable in its current form.</p> <p>The option studies have been reviewed by the OPW and its engineering consultants who have concluded that some of the key assumptions adopted to reach their conclusion are flawed.</p>	Please refer to responses (1) to (5) above.
74	10.0 Conclusion	39	<p>This proposal will have a significant negative impact on the Green.</p> <p>The OPW has several concerns regarding the design and location of St. Stephen’s Green Station. The current design of the Station will have irreparable impacts on the biodiversity, built heritage, landscape and design, and the experience of the public park. It will dilute the historical significance of the Park and weaken its separation from the active and loud streetscapes, that it currently acts as an oasis from.</p>	TII do not agree with this statement for the reasons set out by the above responses.
75	10.0 Conclusion	39	<p>The design and the submission from MetroLink must provide clear and specific detail as to how the Station will impact the Park. We are of the view that any dilution of the Park’s historic or ecological importance is a clear violation of local planning guidelines and must be avoided. The Green is a special and unique part of Dublin and Ireland’s heritage and a key aspect of the city’s green infrastructure that must be protected going forward.</p>	The submitted Railway Order has fully assessed the impacts on St Stephen's Green and presented the results in the EIAR. The above responses also address these observations.
76	Appendix 1: List of Planning Legislation & Policy Documents	40	<p>This appendix provides a non-exhaustive list of planning policy, legislation, and guidelines. We would respectfully request that An Bord Pleanála ensure that TII have fully assessed the Project with regard to existing planning policy, as well as adherence to the relevant local policies and guidelines pertaining to each individual property.</p> <p>It is also crucial to note that on foot of a granted Order and during the detailed design stage, a revision to planning policy is expected, whereby adopted plans and legislation may have to be adhered within this stage. This may require an amendment to the Draft Railway Order and further assessment, including public consultation.</p>	Please refer to response (25) above.
77	Appendix 2: Ground movement Assessment	45	Duplicate of Appendix to D to OPW Cover Letter - Re: Railway (Metrolink–Estuary to Charlemont via Dublin Airport) Order 2022 – Submissions by the Commissioners of Public Works in Ireland	Please refer to 'Cover Letter' and response (19).